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ECONOMICS

IN TWO VOLUMES

VOLUME II

MODERN ECONOMIC PROBLEMS

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Economics—Volume II

MODERN ECONOMIC PROBLEMS

PHILURA GOULD BALDWIN
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BY

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FOREWORD

The present volume deals with various practical problems in economics, as a volume published a year earlier dealt with the broader economic principles of value and distribution. To the student beginning economics and to the general reader the study of principles is likely to appear more difficult than does that of concrete questions. In fact, the difficulty of the latter, tho less obvious, is equally great. The study of principles makes demands upon thought that are open and unmistakable; its conclusions, drawn in the cold light of reason, are uncolored by feeling, and are acceptable of all men so long as the precise application that may justly be made of them is not foreseen. But conclusions regarding practical questions of public policy, tho they may appear to be simple, usually are biased and complicated by assumptions, prejudices, selfish interests, and feelings, deep-rooted and often unsuspected.

M. BATCHELOR FEB 23'40

No practical problem in the field of economics can be solved as if it were solely and purely an economic problem. It is always in some measure also a political, moral, and social problem. The task of the economist "as such" is the analysis of the economic valuation-aspects of these problems. We may recall Francis A. Walker's comparison of the economist's task with that of the chemist, which task, in a certain case, was to analyze the contents of a vial of prussic acid, not to give advice as to the use to make of it. Accordingly, in the following pages, the author has endeavored primarily to develop the economic aspects of each problem, and has repeatedly given warning when the discussion or the conclusions began to transcend strict economic limits. In many questions feeling is nine-tenths of reason. If the reader has different social

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sympathies he may prefer to draw different conclusions from the economic analysis.

The outlook and sympathies that are expressed or tacitly assumed throughout this work are not so much those personal to the author as they are those of our present day American democratic society, taken at about its center of gravity. When the people generally feel differently as to the ends to be attained, a different public policy must be formulated, tho the economic analysis may not need to be changed. Therefore, in some cases, the author has discussed merely the economic aspect, or has referred to the general principles treated in volume one, and has purposely refrained from expressing his personal judgment as to "the best" policy for the moment.

The present volume was planned some years ago as a revision of a part of the author's earlier text, "The Principles of Economics" (1904). The intervening years have, however, been so replete with notable economic and social legislation and have witnessed the growth of a wider public interest in so many economic subjects, that both in range and in treatment this work necessarily grew to be more than a revision. Except in a few chapters, occasional sentences and paragraphs are all of the specific features of the older text that remain. Suggestive of the rapid changes occurring in the economic field is the fact that a number of statements made in the manuscript a few months or a few weeks ago had to be amended in the proof sheets to accord with recent events.

The author's debt for information, inspiration, and assistance in various phases of the work is a large one. The debt is owing to many,—authors, colleagues, and students. A few of the sources that have been drawn upon will be indicated in a pamphlet following the plan of the "Manual of References and Exercises in Economics," already published for use in connection with Volume I; but the limits of space will prevent a complete enumeration. I wish, however, in particular, to acknowledge gratefully the aid and friendly criticisms given in connection with the chapters on money and banking, on

labor problems, and on the principles of insurance, respectively, by my colleagues, E. W. Kemmerer, D. A. McCabe, and N. Carothers.

In completing, at least provisionally, the present work, the author cherishes the hope that it will be of assistance not only to teachers and to students in American colleges, but also to citizen-readers seeking to gain a better and a non-partisan insight into the great economic problems now claiming the nation's conscience and thought.

F. A. F.

Princeton, N. J., October, 1916.

MODERN ECONOMIC PROBLEMS

PART I

RESOURCES AND ECONOMIC ORGANIZATION

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MODERN ECONOMIC PROBLEMS

CHAPTER 1

MATERIAL RESOURCES OF THE NATION

§ 1. Politico-economic problems. § 2. American economic problems in the past. § 3. Present-day problems: main subjects. § 4. Attempts to summarize the nation's wealth. § 5. Average wealth and the problem of distribution. § 6. Changes in the price-standard. § 7. A sum of capital, not of wealth. § 8. Sources of food supply. § 9. The sources of heat, light, and power. § 10. Transportation agencies. § 11. Raw materials for clothing, shelter, machinery, etc.

§ 1. **Politico-economic problems.** The word "problem" is often on our tongues. Life itself is and always has been a problem. In every time and place in the world there have been questions of industrial policy that challenged men for an answer, and new and puzzling social problems that called for a solution. And yet, when institutions, beliefs, and industrial processes were changing slowly from one generation to another and men's lives were ruled by tradition, authority, and custom, few problems of social organization forced themselves upon attention, and the immediate struggle for existence absorbed the energies and the interests of men. But our time of rapid change seems to be peculiarly the age of problems. The movement of the world has been more rapid in the last century than ever before—in population, in natural science, in invention, in the changes of political and economic institutions; in intellectual, religious, moral, and social opinions and beliefs.

Some human problems are for the individual to solve, as,

whether it is better to go to school or to go to work, to choose this occupation or that, to emigrate or to stay at home. Other problems of wider bearing concern the whole family group; others, still wider, concern the local community, the state, or the nation. In each of these there are more or less mingled economic, political and ethical aspects. Economics in the broad sense includes the problems of individual economy, of domestic economy, of corporate economy, and of national economy. In this volume, however, we are to approach the subject from the public point of view, to consider primarily the problems of "political economy," considering the private, domestic, and corporate problems only insomuch as they are connected with those of the nation or of the community as a whole. Our field comprises the problems of national wealth and of communal welfare.

What then are our politico-economic problems in America? They are problems that are economic in nature because they concern the way that wealth shall be used and that citizens are enabled to make a living; but that are likewise political, because they can be solved only collectively by political action.

§ 2. **American economic problems in the past.** With the first settlements of colonists on this continent politico-economic problems appeared. Take, for example, the land policy. Each group of colonists and each proprietory landholder had to adopt some method of land tenure whether by free grant or by sale of separate holdings or by leasing to settlers. In one way and another these questions were answered, but rapidly changing conditions soon forced upon men the reconsideration of the problem as the old solution ceased to be satisfactory.

In large part our political history is but the reflection of the economic motives and economic changes in the national life. Thus the American Revolution arose out of resistance to England's trade regulations, commercial restrictions, and attempted taxation of the colonies. The War of 1812 was

brought on by interference with American commerce on the high seas. The Mexican War was the result of the colonization of Texan territory by American settlers and the desire of powerful interests to extend the area of land open to slavery. The Civil War arose more immediately out of a difference of opinion as to the rights of states to be supreme in certain fields of legislation, but back of this political issue was the economic problem of slave labor. Illustrations of this kind, which may be indefinitely multiplied, do not prove that the material, economic changes are the cause of all other changes, political, scientific, and ethical; for in many cases the economic changes themselves appear to be the results of changes of the other kinds. There is a constant action and reaction between economic forces and other forces and interests in human society, and the needs of economic adjustment are constantly changing in nature.

§ 3. **Present-day problems: main subjects.** The particular economic problems in America at this time are determined by the whole complex economic and social situation. Two main factors in this may be distinguished: the objective and the subjective, or the material environment and the population composing the nation. The one is what we have, the other is what we are, as a people. These factors are closely related; for what we are as a people (our tastes, interests, capacities, achievements) depends largely on what we have, and what we have (our wealth and incomes) depends largely on what we are. We may consider the following phases; the first two of the objective factor, and the last two of the subjective factor.

(a) The basic material resources, consisting of the materials of the earth's surface and the natural climatic conditions which together provide the physical conditions necessary for human existence, and which furnish the stuff out of which men can create new forms of wealth.

(b) The industrial equipment, consisting of all those artificial adaptations and improvements of the original resources

by which men fit nature better to do their will. These two (a and b) become more and more difficult to distinguish in settled and civilized communities, and become blended into one mass of valuable objects, the wealth of the nation.

(c) The social system under which men live together, make use of wealth and of their own services, and exchange economic goods.

(d) The people, considered with reference to their number, race, intelligence, education, and moral, political, and economic capacity.

The particular economic problems which are presented to each generation of our people are the resultant of all these factors taken together. A change in any one of them alters to some extent the nature of the problem. The problems change, for example, (a) with the discovery or the exhaustion (or the increase or decrease) of any kind of basic material resources; (b) with the multiplication or the improvement of tools and machinery or the invention of better industrial equipment; (c) with changes in the ideals, education, and capacities of any portion of the people whether or not due to changes in the race composition of the population; (d) with the increase or decrease of the total number of people, and the consequent shift in the relation of population to resources. Many examples of such changes may be found in American history, and some knowledge of them is necessary for an appreciation of the genesis and true relation of our present-day problems.

§ 4. **Attempts to summarize the nation's wealth.** If we seek to compare the material resources of the nation at one period in our history with those at another period, we find that it is impossible to find a single satisfactory expression for them. Let us examine the figures for the (so-called) "wealth of the people of the United States",[1] as it has been calculated by the census officials.

[1] It is to be observed that these figures appear under the general title of Part I, "Estimated valuation of national wealth: 1850–1912," and

	Population.	*Total "wealth."*	*Average per capita wealth.*
1850	23,200,000	$7,136,000,000 [a]	$308
1860	31,400,000	16,160,000,000 [a]	514
1870	38,600,000	24,055,000,000 [a b]	624
1880	50,200,000	43,642,000,000	870
1890	62,900,000	65,037,000,000	1,036
1900	76,000,000	88,517,000,000	1,165
1904	82,500,000	107,104,000,000	1,318
1912	95,400,000	187,739,000,000	1,965

[a] Taxable only; all other figures include exempt.
[b] Estimated on a gold basis.

A detailed comparison of the classes of concrete things making up the totals is possible only in the last three sets of figures (1900 to 1912), and they are here given (omitting 000,000).

	1900.	*1904.*	*1912.*
1. Real property (excepting some items below)	52,538	62,331	110,700
2. Irrigation enterprises	[a]	[a]	360
3. Agricultural equipment (livestock, tools, etc.)	3,822	4,919	7,706
4. Manufacturing equipment	2,541	3,298	6,069
5. Transportation agencies	11,249	14,434	22,360
6. Telegraph and telephones	612	813	1,304
7. Waterworks (privately owned)	263	275	290
8. Electric lighting plants	403	563	2,099
9. Products (still in trade) [b]	8,294	10,212	21,577
10. Direct goods in use [c]	6,880	8,250	12,758
11. Gold and silver	1,677	1,999	2,617

[a] No figures for these years.
[b] The main items are agricultural and mining products and imported merchandise.
[c] The main items are clothing, personal adornment, furniture, and carriages.

§ 5. **Average wealth and the problem of distribution.** The foregoing figures make a most satisfactory showing, and

the tables are spoken of (volume on Wealth, Debt, and Taxation, p. 20) as "estimates of the aggregate wealth of the nation as prepared by the United States censuses," but the tables themselves are described (pp. 23–25) as the "estimated true valuation of all property," this phrase being used as equivalent to "wealth." For the definitions of wealth and property see Vol. I, pp. 264–265.

appear to indicate that mere economic problems are rapidly being solved by the growth of national wealth. But unfortunately these figures have little significance in connection with such an inquiry, if indeed they are not badly misleading.

In the first place, the final figures of "per capita wealth" are merely averages; a per capita increase, therefore, may appear when total wealth increases, altho the total may be due to the growth of comparatively few very large fortunes. The fact is evident that vast numbers of individuals and families are nearly propertyless and in so far as this is true there is involved one of the greatest of our socio-economic problems, that of the distribution of wealth and income among the people. The more unequal the distribution, the greater, in all likelihood, is the discontent; and the greater the effort of many men to find some methods by which greater equality may be attained.

§ 6. **Changes in the price-standard.** These figures, moreover, are expressed in terms of the monetary price-unit, in dollars of the gold standard, and therefore the increasing total figure (and correspondingly, the increasing per capita) may be but the reflection of a change in the value of the monetary unit. It is well known that the gold dollar has now less purchasing power than in 1880, and less also than at any intervening time.[2] To the extent that this is true the increase in the figures of wealth (total and per capita) is only nominal and does not indicate increase in the quantity and betterment in the quality of real wealth. This fact is so evident that it would seem unnecessary to call attention to it, if it were not constantly overlooked in citing these figures.

§ 7. **A sum of capital, not of wealth.** Consider further, that the figures here given for wealth really express but the sum of capitals of the individuals (or private corporations)

[2] This change will be described below in ch. 6, in treating of the standard of deferred payments.

of the nation. These do not constitute a sum of social wealth in any proper sense of the term.[3] Arithmetically it is a fallacious kind of a total, for the sum of the individual capitals contains some items that should be canceled to find the sum of wealth. Moreover, capital is an acquisitive concept. It is an expression of the value of a man's possessions, and not of the utility [4] of them. It measures intensity of desire for goods and not necessarily the degree of welfare. Such a total, therefore, embodies the difficulties of the paradox of value; in some cases increased value reflects a growing scarcity and not greater abundance.[5]

For example, between 1900 and 1915, with the growth of population, the total number of improved acres in farms in the United States increased but little, and the per capita number diminished. At least in part as a result of this fact, the prices of nearly all kinds of food rose rapidly, as did also the price of farm land. The prices (and estimated values) of farm lands are the expression of the individual capitals, which formed each year an increasing statistical total of so-called wealth. The people had less land per capita, and were poorer per capita as respects this item of landed-wealth, had less meat per capita, and had to give more labor in exchange for food, at the same time that the statistical per capita of land values increased.

So it may be as respects forests, coal, cotton, and eventually iron, copper, and many other things. When forests were plentiful, lumber and fire wood were free goods in many neighborhoods. Forests entered into the total of national "wealth" in 1850 and 1860 at a comparatively small sum. But in 1910 when the forests had been half used up they appeared as a greater total and probably as a greater per capita item of "wealth" than in 1850. The figures reflect

[3] See Vol. I, pp. 265, 278, 508 for the distinction between wealth and capital.

[4] See Vol. I, p. 25, for the definition of utility.

[5] See Vol. I, p. 510 on the paradox of value.

changes in the paradoxical section of the scale of values, and express scarcity rather than wealth.

Altho the wealth of a nation may not be expressed as a single sum of values that accurately reflects the weal-bringing things composing its environment, some conception of the situation is to be gained by an enumeration of goods in their kinds and quantities and by studying their relations to the life of the people. Objects of wealth may be grouped in various ways. The following may serve our purpose of a general survey of our present resources.

§ 8. **Sources of food supply.** The land area of the country in 1910 was about 1,900,000,000 acres, of which 879,000,000 acres were in farms, this being 46 per cent of the total area. A very small part of the remainder is used for residential and commercial purposes, the rest being barren mountains, deserts, swamps, and forests. Of the total in farms a little more than one-half was improved, 478,000,000 acres altogether, a per capita average of 5.2 acres; and a little less than one-half was unimproved, 400,000,000 acres altogether, a per capita average of 4.3 acres. The improved land produced not merely food but many kinds of materials, such as cotton, wool, hides, and lumber, while much of the unimproved land was either in farm wood-lots, or in rough range pasture. Of course the kinds and amounts of produce per acre vary with the climate, particularly with sunshine and rainfall; possibly the proportion of the area of the United States that is true desert and infertile mountain land is greater than that of any other equal area in the temperate zones. The actual productive capacity per acre of the lands of America cannot be expressed in a very helpful way as a general average per acre, but each area must be carefully studied in respect to its climate, rainfall, and possibility of irrigation and drainage. It is evident that a very large number of economic problems must arise in connection with the land supply for food: such as problems of land-ownership, taxation, irrigation, drainage, forestry, and encour-

agement or limitation of population. We are just beginning to awaken to the needs in this direction.

The rivers, lakes, and ocean waters near our coasts are other great sources of food, but no statistics are available to show adequately their yield. Few of them are in private possession and they do not appear at all in a total of "capitals," yet they are more important to the nation than a large part of the land area. They are only beginning to be developed artificially by the propagation of oysters, clams, and fish. The development of a proper policy in this matter is one of our economic problems.

There were in 1910 (mostly on farms) about 64,000,000 beef and dairy cattle, 60,000,000 swine, 56,000,000 sheep and goats, and there were raised in the one year nearly 500,000,000 fowls of all kinds.

§ 9. **The sources of heat, light, and power.** The law of the conservation of energy expresses the fundamental likeness of heat, light, and power. The principal sources from which man derives these agencies are coal and falling waters, tho wood is of importance as fuel in some localities. About 500,000 square miles of land (about 13 per cent of the area of the country) are underlaid with coal. These deposits are widely distributed, so that nearly every part of the country is within 500 miles of a mine. The enormous deposits if used at the present amounts per year would last probably 2,000 to 4,000 years, but if used at the present increasing rate (doubling the product every ten years) they would, it has been estimated, last but 150 years. What shall be the actual rate as between these extremes is a question whose answer depends on our economic legislation as to ownership, exploitation, prices, use, and substitution. This is another of our important socio-economic problems.

The one great available substitute for coal as a source of heat and light and power is water power. It is estimated that in 1908 but 5,400,000 horse power was being developed from water falls, whereas about 37,000,000 primary horse

power [6] was available; but, by the storage of flood waters so as to equalize the flow, at least 100,000,000 horse power, and possibly double that amount, could be developed. As it requires ten tons of coal to develop one horse power a year in a steam engine by present methods, there is here a potential substitute for coal equal to two to four times our present annual use of coal (about 500,000,000 tons in 1912).

But this does not mean that it would be economical, at present costs of mining coal and of building reservoirs, to make this substitution now. To determine when, how far, and by what methods to develop this water power from lakes and rivers for the use of the people and to make this substitution, is another of our great economic problems.

Petroleum and natural gas, of which our original reservoirs were perhaps the richest in the world, are being rapidly exhausted. These may be merely mentioned as being related to coal in the source of their supply, in the nature of their uses, and in the economic problems to which they give rise.

§ 10. **Transportation agencies.** First to mention among the means of transportation are the navigable waters—oceans, lakes, rivers, and canals, with the necessary equipment of dredged inlets, harbors, docks, locks, and lighthouses. Few of these appear in the total of "capitals," for they are not in private possession. Yet a good system of natural waterways may be greater wealth to one nation than costly additional railroads are to another. Good natural harbors on the waterways leading out to the oceans are a most important kind of national wealth, as are the navigable great lakes within the boundaries or on the borders of a country. Just in proportion as these natural means of transportation are lacking, is the need to build costly artificial means of transportation.

[6] That is, "the amount which can be developed upon the basis of the flowage of the streams for a period of two weeks in which the flow is the least," all the rest being allowed to escape unused. Van Hise, "Conservation of Natural Resources," p. 119.

Both in natural and in artificial means of transportation, America is well provided. The straight coast line is 5700 miles long, and the line following indentations of the coast is about 64,000 miles. The Great Lakes with a straight shore line of 2760 miles are the most important inland waterways in the world. The 295 navigable rivers in the country have a length of 26,400 miles of navigable water. About 2000 miles of canals are still in operation. On the waterways some 27,000 American vessels are in use, with a capacity of 8,000,000 gross tons.[7]

There are about 250,000 route miles of steam railroads, or with additional tracks, yard tracks, and sidings, a total of about 370,000 miles. On these are over 63,000 locomotives, 52,000 passenger cars, and 2,400,000 freight and company cars. Besides these are 45,000 track miles of electric railways and nearly 100,000 cars. These railroads include an enormous aggregate of works and structures in the form of tunnels, cuts, banks, bridges, stations, and shops.

There are in the country (1914) about 2,228,000 miles of public roads, of which 10 per cent are "surfaced" roads. No figures are now available of the number of wagons, horses, automobiles, and other vehicles in use on the roads and streets for purposes of transportation.

Many of our economic problems are presented by these transportation agencies, from the question of opening a new dirt road in a rural township to that of building an interoceanic canal, from the question whether to have free public roads or toll roads to that of regulating the railroad rates on the whole railroad system of the country.

§ 11. **Raw materials for clothing, shelter, machinery, etc.** The farm lands supply, besides food, a large part of the raw materials for many other goods, such materials as cotton, flax, wool, hides, feathers, lumber, and firewood. The farm woodlots compose about 200,000,000 acres, and the large forests, public and private, about 350,000,000 acres, a total of

[7] These and other figures in this section relate to the year 1913.

about one-fourth the area of the country in forests, containing about one-half of the lumber that the country once possessed. The economic problem of a sound forestry policy is one of the largest we have to solve.

The most important other sources of raw materials for industry are the mineral deposits in the earth's surface.[8] This country is stored more bountifully, probably, than is any other country, with the metal ores of iron, copper, lead, zinc, gold, and silver. Aluminum is the most abundant metal, composing about 8 per cent of the crust of the earth, but by present methods it can be extracted only at considerable cost from certain compounds that are limited in amount. The details as to our metal stores are too complex for fuller treatment here, and may be found in treatises on economic geology or on industrial geography. The determination of wise policies as to the use of these stores involves many economic problems, private and public.

Another great class of material wealth is in the form of tools, machinery, and other agencies for carrying on the industrial processes of farming and of manufacturing. These are sometimes called instrumental goods, or the industrial equipment. Still another class consists of the great mass of completed direct goods, such as houses to live in, libraries, museums, school buildings, theaters, all kinds of buildings and equipment for pleasure and entertainment, parks, and pleasure resorts in mountains, at lakes or sea shore. The possession and use of these forms of wealth give rise to some economic problems of public ownership and to others connected with the institution of private property in general, as sketched in the following chapter.

[8] Coal has been mentioned above, sec. 9.

CHAPTER 2

THE PRESENT ECONOMIC SYSTEM

§ 1. The place of private property. § 2. Nature of property. § 3. Relation of wealth, property, and capital. § 4. Some theories of private property. § 5. Origin vs. justification. § 6. Limitations of private property. § 7. Limitations of bequest and inheritance. § 8. Social expediency of private property. § 9. The monetary economy. § 10. The competitive system. § 11. Limitation of competition by custom. § 12. Effect of modern forces upon custom. § 13. Adam Smith's influence. § 14. The wage-system.

§ 1. **The place of private property.** Of fully equal importance with material wealth in determining the economic power of a people is the *social system* under which the nation lives. This is the term applied to the whole complex of institutions and arrangements in which and by which people live together in society. It is the embodiment of the opinions, ideas, and habits of life inherited by each generation from its forbears. It is, indeed, a people's whole state of civilization with its political, economic, intellectual, scientific, religious, and esthetic aspects.

The most important economic aspect of the existing system is, broadly speaking, the institution of private property. So closely connected with this that they are hardly more than different phases of the same thing, are the use of money (the monetary economy), the wage system, and competition as a mode of distribution. "The institution of private property" is the general expression for the way in which men in the modern state make use of their own energies and of material wealth within the nation. Nearly all the total of the things mentioned in the table in Chapter 2, section 4, are owned by

private citizens.[1] We live in a régime of private property, and all our economic problems are affected by that fact. The determination of the exact boundaries of private property makes up a large part of the politico-economic problems which the people in each generation have to solve. A large share, possibly, in a certain sense, every one of the economic problems that are discussed involve change, limitation, definition, or, more radically, abolition of present laws of property. Broadly understood, as above, therefore, determination of the nature of private property is *the essential* economic problem.

§ 2. **Nature of property.** Property means ownership, and "ownership" is the abstract noun expressing the quality of possessing a thing. Correspondingly, "owner" is the Anglo-Saxon equivalent of "proprietor." Property thus, fundamentally, means not an object held, or possessed, but the right in or belonging to a person to control something that he owns. Ownership is a legal right to control under certain conditions.[2] Physical possession of an object is not necessarily ownership.

There are different kinds of ownership. It may be private, as that of individuals, families, partnerships, or corporations; or it may be public, as that of nations, states, counties, cities and towns, owning such things as public buildings, parks, highways, the Adirondack forest-reserve, or the Erie Canal. These two kinds are equally effective as against the claims of outsiders, but the rights of those inside the circle of ownership

[1] The exceptions are probably unstated amounts of exempt real estate (owned by municipalities, state, and nation), some of the irrigation plants, part of the canals, and that part of the gold and silver which is in the public treasury.

[2] See Vol. I, pp. 264–267. The law makes between property rights and equitable rights some subtle distinctions, which have their reason in the history, if not in the logic, of the law, but which are not essential to economic discussion. In some states this distinction has been in large measure abolished. What interests us are the rights (claims) that men have to the control of wealth and services, whether by technical law these are called legal or equitable, and this right is what is meant by "property" in our discussion of it.

differ. For example, the rights of one shareholder against another, or the rights of one member of a family as against another, are not the same as the rights against outsiders. Private property is the characteristic feature of our present industrial society, but it exists side by side with public property and with many intermediate grades between private and common property.

Tho property meant originally and essentially the intangible right to a thing, the word came to be applied also to the object of the right. This is done both in common speech and in judicial decisions, with inevitable ambiguity. This may be readily seen by trying to substitute the word ownership for property, a thing quite simple in some cases but impossible in others. One would not point to a house and say, "This is my ownership," but either, "This is my property," or "I exercise ownership over it." It is well recognized that a man may have a property right in this abstract sense in or over his own services, as to practise a trade or in the "good will" of a business or in an intangible patent or a copyright, quite as well as in a material object.

§ 3. **Relation of wealth, property, and capital.** A failure to see this distinction and to keep it clearly in mind has led to confusion, even on the part of legislatures, learned judges, and able economists. If property is said to be (for example) a house and lot and at the same time the right to that house and lot, then there are two properties at once for each economic good, viz.: the object itself and the right to it.[3]

This difficulty could be avoided by the consistent definition and use of terms. A material economic object is a good, is a form of wealth. The usance of wealth and the service of laborers at the moment rendered constitute forms of income. The right of ownership, i.e., the right to control, use, or direct the use of wealth and services, is property, which is therefore the right to receive incomes. The value of the in-

[3] This confusion has had important practical consequences in the field of taxation. See Vol. I, pp. 265–267, and below, ch. 17.

comes of an individual constitute his capital. Goods, rights to goods, value of rights to goods: these three things are clearly distinguishable.

§ 4. **Some theories of private property.** Various theories have been framed to explain the origin and to justify the existence of private property. The occupation theory is that property is based upon the priority of claim of one who finds wealth without an owner and appropriates it. This is not an explanation of the property rights that are arising every moment, nor does it give a logical reason for the continuance of ancient property rights. It is a statement applying to a case that has rarely happened, the settlement of an unoccupied territory.

More adequate to explain many cases is the conquest theory, that property is based on force; for nearly all lands to-day are occupied by the descendants of conquering invaders who took the lands and natural resources from the former inhabitants, who in turn had taken them from other occupants, many centuries before. The conquest theory applies, for example, to the invasion of the Roman provinces by barbarian tribes who divided the country and developed the feudal system based on land tenure. But it hardly applies to present-day happenings, and at its best it cannot, to modern minds, "justify" present property rights.

The labor theory, meeting some queries where others fail, is that ownership is based on the act of production. It is declared that every man has a right to that to which his brain and his muscle have imparted value. It is evident that this test leaves without explanation or justification a great number of things that do exist and have existed as property. Usually the basis of the labor theory of property is declared to be each individual's natural right to the results of his own labor, which claim is assumed to be an ultimate, undebatable, axiomatic fact. However, that type of natural-right doctrine, which makes no appeal to experience and results, is now quite discredited in political science.

Another form of natural-rights theory is that property is necessary for the realization of the dignity of human nature and every individual has the natural right to self-realization. This theory is, in a way, based on an appeal to experience, as to the effect of property on human character, and it has the virtue of expressing one of the ideals of modern democracy. Altho, in common with various other "natural-rights" theories, it must be deemed too absolute and too individualistic, it contains a far-reaching truth, of which due account must be taken in our social philosophy.

The legal theory is that property exists because the law says it shall. This expresses a truth, but is no more than a truism. The law determines the limits of property, but what determines the limits of the law? What practical or social justification is there for passing and continuing such law? The legal theory does not contain a final explanation. Each of these theories has its defects, but each points to some fact important and significant, at certain times and places, in the explanation of this widespread institution.

§ 5. **Origin vs. justification.** The question of the origin is not the same as that of the present justification of the existing system of private property. The institution of private property has evolved under diverse conditions. In early societies individual property rights were not very clearly marked. Every tribe asserted against other tribes, and tried to uphold by war, its claims upon its customary hunting grounds; but the claims of the individual hunters on land within the tribe did not often come into conflict. Private property at the outset was in personal possessions, ornaments, weapons, utensils, which were very meager in that primitive society in which it was the custom "to go calling with a club instead of a card-case." Only later came individual property in land. A few years ago it was generally believed that the organization of the old German tribes was politically an almost perfect democracy, and economically a communism in which all had equal claims upon the land. To-day this opin-

ion is very seriously questioned. It seems probable that there was a goodly measure of communism in the control and use of lands (tho not in other things), but this was largely confined to an oligarchy of the favored; whereas the masses lived in subjection, cut off from all but a meager share in the common lands. However that may have been, strong forces within historic times have put an end to the common ownership and tillage of land as it existed among the peasants of Europe. That system was shown by experience to be wasteful. Competition tended to bring the economic agents into more efficient hands, and the movement was furthered by many acts of injustice and violence on the part of those in power.

Inquiries into the origin and development of any social institution are interesting and helpful in forming an estimate of its present significance, but the problems of the past are not those of to-day. Whether or not the ancient beginning of property in Europe was in violence and evil has but a remote bearing on the question as to the present working of it. Social conditions and needs have not changed more than have the forms and limits of property itself. Each generation has its own problems to solve, and ignoring for the most part the evils of the distant past, each generation must test existing institutions by their present results.

§ 6. **Limitations of private property.** It is well, in discussing private property, to rid the mind at once of the idea that it is an absolute and unchanging thing. Few realize the manifold ways in which property rights are limited. Unmodified private control of property is unknown; the public makes many reservations in its own interest. There is, first, a whole set of limitations to prevent nuisances. An owner in many situations is not free to build a slaughter-house or to start a glue-factory on his land. Property is governed by general public utility, and anything that threatens to become a nuisance or a danger may be excluded. Under the right of "eminent domain," the state or the railroad takes the old homestead from the owner who would live and die there.

Altho pecuniary damages are paid to him, this is a limitation of his property rights. Rights of way on property exist either by contract or by prescription permitting its public use. Most important of all limitations is the right of taxation, by which society takes more or less of private incomes for purposes of which the individual owners may not approve.

The law enforces a multitude of private claims by some persons against others. A variety of rights called easements or servitudes may attach to private property, modifying its exclusive use. Leases for any period are a limitation of the owner's control. Both the holder of the lease and the owner of the property have certain rights before the law. The lender of money secured by mortgage has a legally recognized and enforceable interest in the mortgaged wealth. Property is left in trust for the benefit of persons or of institutions or of the public, and is administered by trustees who are strictly bound to execute the terms of their instructions. Contracts of many sorts are entered into by owners, limiting their control in manifold ways, and the law enforces these contracts. These all form a complex of equitable claims, which together equal in value one undivided property right, which in turn equals the value of the wealth.[4]

§ 7. **Limitations of bequest and inheritance.** The term bequest implies a will, usually a written will in which the person, in anticipation of death, expresses his wishes as to the disposition of his property. It is said sometimes that bequest is a "logical" result of private property, but the law does not treat it as such. The right of bequest, or of gift at death, is limited in various ways in different countries. In countries where hereditary aristocracies exist, primogeniture is in some cases required by law, in others so strongly favored by public opinion that it is practically always followed. Custom limits

[4] These claims mutually delimit each other (whether they be called equitable claims, or liens, or property rights), and wealth is not multiplied by multiplying the claims, as is unfortunately sometimes assumed to be the case. See above, sec. 3.

bequests in England to members of the family, and wills given outside the family are rare, and are almost always broken in the courts. John Stuart Mill contrasted this with the practice in America, frequent even in his day and still more frequent now, of rich men giving for public purposes. In France the right of bequest outside the family is legally limited; only the share of one child can be willed away by the father, and the rest must be equally divided among the children. Settlements and *fidei commissa* are limited in many countries, because of the recognized social evils resulting from the tying up of estates for generations. Throughout the history of England, Parliament has given attention to the question of mortmain, which chiefly concerned the drifting of great estates into the hands of the church or of corporations, as the result of bequests by the pious. In England, of late (and to a less extent in this country), the policy of permitting unlimited endowments to charitable institutions has been seriously questioned, and by legislation some of the old endowments have been diverted from their original purposes when these have ceased to be of social utility. Inheritance, in contrast with bequest, usually means succession to the property of one who has died intestate, that is, has made no will. The law of inheritance likewise varies greatly with time and place.

§ 8. **Social expediency of private property.** In the light of present political philosophy the explanation and justification of private property must be on grounds of social expediency. This is a broad explanation and it has the fault of a broad explanation, that it needs to be further explained. Under it can be brought the many varying conditions. Even if private property works hardship to individuals in many cases, yet it may be justified if, on the whole, it is best for the progress of society. Laws must be judged by their average working, not by exceptional cases. In general, the system of private property must be judged by this test: Does it further the welfare of the nation better than would any alternative plan for the control of economic wealth? The question

is not whether it is faultless, for no human institution is so. Nor must it be assumed that the rule of property needs to be uniform in respect to all kinds of wealth. There are many kinds of property, and the test may be applied separately to the different forms and to the varying degrees of property rights. The varied and often strict limitations of property mentioned above are all determined by some thought, wise or foolish, of social expediency. Different parts of wealth may be treated in different ways: there may be private property in wagons, and public property in roads; private property in houses, and public property in forests; private property in automobiles, and public property in railway carriages. But any rule of property, like any other workable human law, must be applicable to all individuals that meet the conditions.

The very acceptance of the theory of social expediency implies the need of frequent readjustment of the institution of private property. The essential thought in the various attacks on the institution of property is that, because it either causes or makes possible the inequality of incomes, it is not socially expedient. Private property, as it is found to-day, is complicated by many historical accidents. Survivals of ancient injustice and relics of feudal institutions that rest on no vital reason remain in our new country as well as in the older ones. The limits of property in many respects are determined not according to the logic of expediency, but by the social inertia which often governs successive generations.

The question is raised in many minds: If private property is not an absolute right, what shall be its limits? What changes should be made in it? These questions put the greatest economico-political problem of our day, one that contains within it, indeed, many minor problems. A number of these will receive attention in the following pages.

§ 9. **The monetary economy.** So greatly does the use of money facilitate the transfer, buying, and selling of private property and so closely are property and pecuniary trade connected in practice and in the thoughts of men, that every rad-

ical proposal to abolish private property has included a plan to do away with money also. But money and private property are not essentially and logically bound up together, for a certain measure of private property always has been found where money was little or not at all used. True; if there were absolutely no private property, there would be little use for money, altho it might still be used as a form of counter by the communistic state. We have already seen [5] how a monetary unit comes into use, and we shall treat more fully of the nature of money in later chapters. We may note here merely that the use of money is an outstanding feature of the present economic system and gives rise to many of the problems of political economy.

§ 10. **The competitive system.** The existing system is likewise characterized by competition [6] in the buying and selling of wealth and of the usances and services of economic agents. By competition we mean here the condition of political freedom on the part of each man to trade his property (goods, uses, or services) as he chooses, and this combined with the disposition on his part to get what he values most highly for himself and his family. Whenever any one else (official or citizen) forbids and prevents a man from getting all he can, in so far competition is limited. Whenever any one is deterred by fear of, or by affection for, some other trader, from getting all he can, in so far competition is limited. Whenever any one conspires with another trader to act together with him to withdraw or to alter his bid, in so far competition is limited. Private property and economic competition do not merely happen to exist side by side, forming more or less favored conditions each for the other; they are essentially connected.[7]

It is not our task at this point to present the advantages

[5] See Vol. I, p. 51.

[6] See Vol. I, p. 73.

[7] This will appear in comparing the competitive method of distribution with other methods in ch. 31.

and disadvantages of competition, but merely to indicate its important place in the actual economic world. Like private property, competition is not the universal feature of our present system, but it is the most general and characteristic method of valuation, of price fixing, and of trade.

§ 11. **Limitation of competition by custom.**[8] The relatively large influence of competition in present society appears more plainly in comparing the present system with that of an earlier state of society or with that of a present savage tribe. A member of the lowest human societies is subject to law; tho he is a savage he is not "untutored." On the contrary he is bound in many ways to follow customary lines of conduct, and a large part of his time is given to learning the traditions and then to observing the ceremonials of the tribe. Primitive customs always take on a religious sanction, and every member of the tribe is piously bound to do as his fathers have done and as his neighbors are doing. This limitation applies to the choice of food to eat, clothes to wear, time to hunt, plant, and harvest, weapons and tools to use, where and how to trade, how much to give or take, and to countless other details of economic choice. So, in early society, economic relations were complex and but slowly changing from generation to generation. Custom, rather than competition, ruled in manifold ways the economic actions of men.

Custom continued to rule a large share of the individual life of the peoples of northern Europe through barbarian and feudal times. Its force has gradually decreased, but even yet is not entirely set aside. Political and economic interests were not clearly distinct in the Middle Ages. Land was the all-important kind of wealth. Military and other public services were performed by the higher landlords (as vassals of their overlords) who in this way paid at the same time what we to-day would call rent and taxes. The landlord in turn received from his underlings services and goods in kind (food

[8] See Vol. I, p. 143, on medieval land tenures; p. 158, on customary rents; p. 190, on the effect of caste.

and supplies) and so (in modern eyes) was both a collector of taxes and a receiver of rent. The rent, however, was not a competitive price, but consisted of the dues and services which the forefathers had been accustomed to pay. In many ways also in the towns, close organizations of craftsmen and of merchants regulated prices and kept others out of their industries. Industrial privilege pervaded the life of that time.

Yet through all the Middle Ages ran the forces of competition. The inefficiency of customary services and the high prices charged by selfish privilege were constant invitations to men to become competitors. Men strove to break over the barriers of custom and of prejudice. Their efforts to attain freedom to compete was the vital force of the time. The industrial history of the Middle Ages was largely the story of the struggle of the forces of competition against the bonds of custom and privilege.

§ 12. **Effect of modern forces upon custom.** The industrial events following the discovery of America strengthened the forces making for economic freedom. Discoveries in the Western hemisphere opened up a wide field for the adventure and enterprise of Europe. Commerce is the strongest enemy of custom, and new opportunities gave a rude shock to the conservatism both of the manor and of the village. With the rapid growth of industry and manufactures, old methods broke down. In an open market custom declines; it flourishes best in sheltered places. Further, the movement of thought in the Reformation, and the spirit of the times which expressed the principle of personal liberty and allowed the individual to follow his own opinions and take the consequences, were favorable to competition. Despite these facts, the restraints of the national governments on trade continued great, in some respects increasing during the seventeenth and eighteenth centuries, in France, Holland, and England. The regulation before attempted by towns and vil-

lages was employed on a larger scale by national governments with their industrial systems. The colonies in America were used for the economic ends of the "mother country" and for the selfish interests of the home merchants in Europe. The American Revolution was one of the bitter fruits of the English policy of trade restriction.

§ 13. **Adam Smith's influence.** "The Wealth of Nations," the first great work on political economy, was published in the year 1776. That was the "psychological moment" for its appearance, as public thought was so prepared for it that it had its maximum possible influence. The year of the American Declaration of Independence gave the most striking object lesson on the evils of a selfish colonial policy that interfered on a grand scale with economic freedom. The old customs had become ill fitted to life, ill adapted to the rapid industrial changes that were going on. What was needed in many directions, both in politics and in industry, was merely negative action by the government, the repeal of the old laws, the overthrow of old abuses. The French Revolution, following a few years later, emphasized this thought in the political field. The philosophers of the time believed in a "natural law" in industry and politics. The reformers of the time wished to throw off the trammels of the past and to give men opportunity to exert themselves "naturally." In America the old abuses never had taken deep root, as the conditions of a new continent were not favorable to monopoly and privilege. Altho the movement for the repeal of medieval laws has continued in Europe from 1776 till the present time, yet custom still is stronger to-day in Europe than in America. Serfdom was not abolished until the first half of the nineteenth century in Austria and southeastern Europe, and not until the last half in Russia. Many economic and cultured forces furthered this movement, but the most powerful intellectual force in its favor was the work of Adam Smith. So strong an impression did Smith's book make, that in the minds of men

"free trade" became almost identical in thought with political economy, whereas that was but the temporary economic problem of the eighteenth century.

Many men then thought that in "free and unlimited competition" had been found a solution of all economic problems for all time. But soon it was apparent that it was no such simple and absolute solution. Indeed many of the present economic problems—in one sense all of them—center around this one: to determine the proper forms and limits of competition. The varied aspects that this problem takes will appear in every portion of the following pages.

§ 14. **The wage-system.** Viewed in another aspect the present economic and social order is called the wage-system.[9] The wage-contract, like the use of money, is not essential to the existence of a system of private property. Communities such as the American colonies and as many of the newly settled states, may consist almost entirely of self-employed owners of land. Bulgaria, before the Balkan wars called the peasant state, presented this organization (tho of course with some wage-payment), as did also its neighbor Serbia. But given the institution of private property with competition (freedom to buy and sell), let manufactures and commerce develop to any extent, and inequalities of fortunes increase while an increasing number of persons work for wages. It is noteworthy that as this goes on (as it has done in America at an increasing rate since the middle of the nineteenth century) it is the agricultural and rural hand industries that continue to be mainly worked by owner-managers and workers, while it is the manufacturing, transporting, and large commercial enterprises in which the labor is done for wages. The acceptance of the wage-system thus far has been the inevitable price to be paid for manufacturing and industrial development; and one of our economic problems is to determine whether this must continue, and if so, whether in the same measure as in the past.

[9] See Vol. I, p. 227.

PART II
MONEY AND PRICES

CHAPTER 3

NATURE, USE, AND COINAGE OF MONEY

§ 1. Origin of money. § 2. Qualities of the original money-goods. § 3. Industrial changes and the forms of money. § 4. The precious metals as money. § 5. Gold-using countries. § 6. Varying extent of the use of money. § 7. Money defined and reviewed. § 8. Metal money without or with coinage. § 9. Technical features of coinage. § 10. Seigniorage defined.

§ 1. **Origin of money.** Everywhere in the world where the beginnings of regular trade have appeared, some one of the articles of trade soon has come to be taken by many traders who did not expect to keep or use it themselves, but to pass it along in another trade.[1] This made it money, for money is whatever comes to be used as a general price-good. The character of a *general* price good clearly distinguishes money from goods bought and sold by a particular class of merchants, such as grain, cattle, etc., to be sold again. It is only in so far as a particular good comes to be taken by persons not specially dealing in it, taken for the purpose of using it as a price-good to get something else which they desire, that a thing has the character of money. The thing called money thus is a durative good passing from hand to hand in a community, and completing its use in turn to each possessor of it only as he parts with it.

The use of money is of such social importance, that it would be impossible for modern industrial society to exist without it. The discussion of money touches many interests, it raises many questions of a political and of an ethical nature. There

[1] See Vol. I, pp. 15–16 and 50–53 for an introductory statement of the origin of money in connection with markets.

are perhaps more popular errors on this than on any other one subject in economics, but the general principles of money are as fully understood and as firmly established as are any parts of economics.

§ 2. **Qualities of the original money-good.** The selection of any money-commodity has not been mere chance, but has been the result of that object being better fitted than others to serve as a medium of exchange. The main qualities that affected the selection of primitive form of money were as follows: 1. Marketability (or saleability); that is, it must be easy to sell. The first forms of money had to be things which every one desired at some time and many people desired at any time. That was the essential quality that made any one ready to take it even when he did not wish to use it himself. Many kinds of food and of clothing are very generally desired goods. But few of these classes of goods have in a high measure certain other important qualities, now to be named.

2. Transportability; that is, the money material must be easy to carry, it must have a large value in small bulk and weight. To carry a bag of wheat on one's back a few miles requires as great an effort ordinarily as does the raising of the wheat, and the cost of carriage for fifty miles even by wagon will often equal the whole value of the wheat. Cattle, while not comparatively very valuable in proportion to weight, and not possessing the other qualities of money in the highest degree, have the advantage that they can be made to carry themselves long distances, and therefore they have been much used as money in simpler economic conditions.

3. Cognizability; that is, the money-good must be easy to know, and to judge as to quality. If expert knowledge or special apparatus are needed to test it in order to avoid counterfeits, few could be ready to take it and trading would be a costly process.

4. Durability; that is, the money-good must be easy to

keep without much loss in amount or in quality, perhaps for long periods, until it can be passed on in trade. Few kinds of food answer very well to this last requirement, being organic and perishable. But all four qualities above named were pretty well embodied in primitive times in rock salt, in rare flints and bits of copper suitable for tools and weapons, in furs in northern countries, and in many articles of personal adornment, such as beads, feathers, jewels, and metal ornaments.

5. Divisibility; that is, the quality in the monetary material that permits it to be divided easily into smaller amounts and then to be united again into larger masses at little cost and without loss in amount or in quality. This quality is present only when the material is quite homogeneous throughout the whole mass, a condition fulfilled more completely by the metals than by any other goods. This quality makes it possible to put the governmental stamp upon the money material, and to produce pieces, some of which are exact duplicates and some exact multiples, of others. In this manner pieces of money are provided suitable for transactions of different magnitudes, down to small fractional amounts. A monetary system of this kind aids greatly the development of the sense and habit of exact estimation of price.

§ 3. **Industrial changes and the forms of money.** The money use, as has just been shown, is a resultant of a number of different motives in men. The changing material and industrial conditions of society change the kind of money that is used. Things that have the highest claim to fitness for money with a people at one stage of development have a low claim at another. The final choice of the money-good depends on the resultant of all the advantages. Shells are used for ornament in poor communities but cease to be so used in a higher state of advancement, and thus their saleability ceases. Furs cease to be generally marketable in northern climes, when the fur-bearing animals are nearly killed off

and the fur trade declines. When tobacco was the great staple of export from Virginia, everybody was willing to take it, and its market price was known by all. It served well then as the chief money, but, as it ceased to be the almost exclusive product of the province, it lost the knowableness and marketability it had before. In agricultural and pastoral communities where every one had a share in the pasture, cattle were a fairly convenient form of money, but in the city trade of to-day their use as money is impossible. Thus, in a sense, different commodities compete, each trying to prove its fitness to be a medium of trade; but only one, or two, or three at the most, can at one time hold such a place.

While industrial changes and conditions affect the choice of money, in turn money reacts upon the other industrial conditions. If a new and more convenient material is found or the value of the money metal changes to a degree that affects the generalness of its use, industry is greatly affected. The discovery of mines in America brought into Europe in the sixteenth century a great supply of the precious metals, and this change in the use of money reacted powerfully upon industry. Money, being itself one of the most important of the industrial conditions, is affected by and in turn affects all others.

§ 4. **The precious metals as money.** Certain of the metals early began to show their superior fitness to perform the monetary function. The metals first used as money were copper, bronze (an alloy of copper with nickel), and iron. These were truly precious metals in early times for they were found only in small quantities in a few localities. They, therefore, were widely sought and highly valued as ornaments and for use as tools and weapons. But as the great ancient nations emerged into history, these materials were already being displaced in large measure. Their value fell greatly as a result of greater production due to somewhat regular mining. As wealth grew, as trade increased, as the use

of money developed, as commerce extended to more distant lands, the heavier, less precious metals failed to serve the growing monetary need, especially in the larger transactions. Silver and gold, step by step, often making little progress in a century, became the staple and dominant forms of money in the world, while copper and nickel still continued to be used for the smaller monetary pieces. Every community has witnessed some stages of this evolution. In this contest silver had proved itself a few centuries ago to be on the whole the fittest medium of exchange for most purposes, though gold was at the same time in use in larger transactions and in international trade.

§ 5. **Gold-using countries.** At the beginning of the nineteenth century nations were divided, in accordance with the metals they used as standards, into two great groups, silver- and gold-using. Since that time, and more rapidly after 1850, gold has displaced silver as the standard money. In a higher degree than any other one material, gold has the qualities of a good standard for rich and industrially developed communities. England for a long period practically has had gold as its standard money; the United States since 1834 (except for the period of paper money from 1862 to 1879); France since about 1879, having shifted gradually from silver, after 1855, under the working of the bimetallic law; Germany since 1873; and Japan since the later nineties. Other countries have been striving to attain it. Since about 1890 some states (including Mexico) and some of the colonial possessions of the great nations (including India and the Philippines) have adopted the plan of "the gold-exchange standard." By this plan gold is the standard price unit, while silver continues to be used all but exclusively as the material in circulation, its amount being controlled and its value regulated on principles to be explained below under coinage, seigniorage, and foreign exchange. There are now left but a few silver-standard countries, the most important

being China. There are, however, numerous countries, notably in South America and Central America, which have fiduciary paper-money standards.[2]

§ 6. **Varying extent of the use of money.** Trade by the use of money at no time has become the exclusive method. Barter still lingers to-day.[3] The extent to which, on an average, money is used in different parts of the world differs widely. The use of money in Siberia is less than in European Russia, and its use is less there than in western Europe. The use of money as compared with barter is generally much greater in the cities than in the rural districts. In the cities of Mexico not only money, but banks and credit agencies are in general use; whereas the rural districts are more backward and make far more use of barter than is the case in the United States. At the ports in the cities of China, India, and South America the use of money may be very like that in European cities; but go a little way into the interior of these countries and conditions as to the use of money change greatly.

However, the comparative per capita amounts of money (in terms of American dollars) in circulation in different countries is far from being a true index of their industrial development or of their commercial activity. Indeed, beyond a certain point the larger average amount of money in circulation in a country may indicate backwardness in the development of banks and other credit agencies rather than greater amount of wealth or of business. Notice, for example, the medium position of the great commercial countries, Germany and the United Kingdom, as compared with other countries above and below them in the following list.

PER CAPITA CIRCULATION OF MONEY IN LEADING COUNTRIES DECEMBER 31, 1912.

France	$48.91	America (U. S.)	$32.98
Australia	38.45	Portugal	29.46
Canada	33.57	Netherlands	26.86

[2] See ch. 5.

[3] See Vol. I, p. 43, on the decline of barter.

Switzerland	24.32	Mexico	$ 9.17
Germany	21.36	Finland	8.38
United Kingdom	21.21	Chile	8.24
Spain	19.96	Turkey	7.09
Brazil	18.79	Russia	6.45
Denmark	17.73	Japan	5.68
Belgium	15.83	Bulgaria	5.57
Austria-Hungary	14.68	Serbia	5.49
Rumania	13.24	Venezuela	5.51
Italy	13.09	India (British)	5.19
South Africa	12.93	Ecuador	4.62
Norway	12.50	Peru	3.17
Sweden	11.59	Colombia	2.32
Greece	11.02	Paraguay	.57

§ 7. **Money defined and reviewed.** Money may be defined as a material means of payment and medium of trade, generally accepted as the price-good and passing from hand to hand. The definition contains several ideas. The words "generally accepted" imply that money has a peculiar social character, is not an ordinary good. As a price-good, money itself must be a thing having value, otherwise it could not be accepted. Trade means the taking and giving of things of value. Money is, therefore, not merely an order for goods, as a card or paper requesting payment; it is itself a thing of value (tho this value may be due partly or solely to its possessing the money function). Such things as a telegram when transferring an order for the payment of money, as the spoken word, and as a mere promise to pay, are not money. Even checks and drafts are merely substitutes for money. Money passes from hand to hand, is a thing that can be handled, and is or can be bodily transported.

The application of the definition is not always easy, for money shades off into other things that serve the same purpose and are related in nature. In many problems money appears to be at the same time like and unlike other things of value, and just wherein lies the difference often is difficult to determine. Even special students differ as to the border-line of the concept, but as to the general nature of money there is essential agreement.

§ 8. **Metal money without or with coinage.** In antiquity

the metals were used as money in bulk; that is, the amount was weighed at each transaction and the quality was tested whenever there was doubt.[4] In countries industrially backward, payments are still made in this manner. For some time after the discovery of gold in California, gold dust was roughly measured out on the thumb-nail. In shipments of gold to-day by bankers to settle international balances, metal may be in the form of bars that bear the mark of some well-known banking house. In all of the cases of this kind the gold is money in fact, but not by virtue of any act of government. The metal is simply a valuable good, the receiver of which values it according to its weight and fineness. This is true even when the government mint, for a small charge, tests and stamps the bars at the request of citizens.

Very early it became the practice of governments to shape and stamp pieces of metal to be used as money, so as to indicate their weight and fineness. The act of shaping and marking metal for this purpose is called coinage.[5] The coinage by government had notable advantages in giving to the monetary units uniformity of size, fineness, and value, with the stamp that was readily recognized. But in its simplest form coinage in no way changed the value of the money, and any other mark equally plain put upon it would have served

[4] "I will . . . refine them as silver is refined, and will try them as gold is tried." Zech. xiii, 9. "I bought the field . . . and weighed him the money, even seventeen shekels of silver. And I . . . weighed him the money in the balances." Jer. xxxii, 9, 10. A shekel was 224 grains, troy weight, which is about equal to six-tenths of the pure metal in a silver dollar to-day and worth now about twenty-four cents in gold. At that time, however, the purchasing power of silver was many times greater than it now is.

[5] From the French *coin*, in turn from Latin *cuneus*, wedge, suggestive either of an earlier wedge-shaped piece, or of a wedge-shaped mark on the piece. The German word *Münze* is from the Latin *moneta* (as is the English *mint*, the place where coins are made), which meant money, that name being taken from the temple of Juno, called *Moneta*, where coins were made.

equally well, if only it had carried with it equal assurance of the quality and weight of the metal.

§ 9. **Technical features of coinage.** For each kind of metal money there is an established *ratio of fineness* for the more precious material, which is mixed with baser metals used as alloys. In the United States all gold and silver coins are made nine-tenths fine; in Great Britain, eleven-twelfths. The established weight of the gold dollar in the United States is 25.8 grains of standard gold which contain 23.22 grains of fine gold. The *limit of tolerance* is the variation either above or below the standard weight or fineness that a coin is allowed to have when it leaves the mint. This is different for each of the principal coins, being about one-fifth of one per cent on a gold eagle. The *par of exchange* between standard coins of different countries is the expression of the ratio of fine metal in them. Thus the par of exchange between the American dollar and the English sovereign (the "pound") is 4.866; that is, that number of dollars contains the same amount of fine gold as an English gold sovereign. The embossed design is merely to make the coins easily recognizable and difficult to counterfeit; and milled or lettered edges are to prevent clipping and otherwise abstracting metal from the coins.

§ 10. **Seigniorage defined.** Coinage, as practised by early governments and rulers, came to be a function of great importance politically as well as economically. The right to issue money came to be one of the most essential prerogatives of sovereignty. The prince, king, or emperor stamped his own device or portrait upon the coin; hence the term seigniorage from *seignior* (meaning lord or ruler). Seigniorage meant primarily the right the ruler, or the estate, has to charge for coinage, and hence it has come to mean also the charge made for coinage, and often, in a still broader sense, the profit made by the government in issuing any kind of money with a value higher than that of the materials (whether

metal or paper) composing it. Coinage is rarely without charge, and often has been a source of revenue to the ruler. In antiquity and in the Middle Ages this right was frequently exercised by princes for their selfish advantage to the injury and unsettling of trade. This introduced a very great problem of value into the use of money.

The coinage is said to be *gratuitous* when no charge is made for coinage. Coinage is said to be *free* if the subject or citizen may take bullion to the mint whenever he pleases, paying the usual seigniorage. Coinage is *limited* if the government or ruler determines when coinage is to take place. Thus, coinage may be both free and gratuitous, when citizens are allowed to bring bullion whenever they please and have it converted into coins without charge or deduction. But coinage is free without being gratuitous when any citizen may bring metal to the mint, whenever he chooses, to be coined subject to the seigniorage charge.

CHAPTER 4

THE VALUE OF MONEY

§ 1. Standard-commodity money. § 2. Alternative uses of the money-good. § 3. Money as a valuable tool. § 4. Relative importance of money. § 5. Concept of the individual monetary demand. § 6. Concept of the community's monetary demand. § 7. The money-material in its commodity uses. § 8. The general level of prices. § 9. Effect of increasing gold production. § 10. The quantity theory of money. § 11. Interpretation of the quantity theory. § 12. Practical application of the quantity theory.

§ 1. **Standard-commodity money.** The actual money in use in almost every country to-day consists of a wide and confusing variety: gold, silver, nickel, copper, paper in various forms, issued by various authorities under various conditions as to amount and as to seigniorage. But among all the kinds, in each country some one kind is found standing preëminent and in a peculiar position, as the *standard* money to which the value of all the other kinds of money is in some manner adjusted. Usually this standard money is composed of a material (gold or silver) which is a commodity; but there are many examples of paper money being for the time the standard. The difficulties of the money problem must be attacked at the point of standard-commodity money, where it is nearest to ordinary value problems and is less complicated than when the various other kinds of money and the various money substitutes are included.

We mean by standard money that kind, no matter what its form, which serves in any country as the unit in which the value of other kinds of money is expressed. The standard usually is a quantity of metal of a certain weight and

fineness, which, as a commodity, has a value also in industrial uses. Coins of this standard are called full, or real, money by some writers that deny the title of money to everything else.

§ 2. **Alternative uses of the money-good.** Let us consider the problem of money-value as it would present itself if only one kind of commodity money were in use. This doubtless was in large measure, if not entirely, the case for a time in early societies after one material had proved itself to be the best suited for the purpose. The history of many kinds of money may, we have seen, be traced back to a point where they were not money, but commodities with a direct value-in-use. Such were ornaments, shells, furs, feathers, salt, cattle, fish, game, and tobacco. Each of these materials has, in each situation, a value which is the reflection of its power to appeal to choice. Now, if to the commodity-use is added the money-use, this increases the demand for that good. No new theory is required to explain the value of a commodity as it gradually acquires the added use of a medium of trade. The money use is one that works no physical or visible change in goods except a slight unavoidable abrasion, and at any time a person receiving a piece of commodity money may retain it for its use-value, as food, ornament, tool, or weapon, or may retain it for a time and then spend it as money. This case of value is no more difficult than that of anything else having two or more uses. For example, cattle are used for milk, for meat, and as beasts of burden. Each of these uses is logically independent as a cause of value, yet all are mutually related, the value of cattle to a particular person being determined by the consideration of all the uses united into one scale of varying gratification.

§ 3. **Money as a valuable tool.** Money is often, by a figure of speech, called a tool. A tool is a piece of material taken into the hand to apply force to other things, to shape them or move them. Figuratively, this is what money does. A man takes it not to get enjoyment out of it directly, but to apply

force, to move something, and that which he moves is the other commodity. Money thus (as money) is always an indirect agent. Adam Smith aptly likened money to the roads and wagons that transport goods, thus gratifying desires by putting goods into more convenient places. The fundamental use that money serves is to apportion one's income conveniently as it accrues and as it is spent. The use of money increases the value of goods by increasing the ease with which trade takes place. Like any tool or agent, money is valued for what it does or helps to do. It enhances the value of the goods that it buys and sells by dividing them into quantities convenient for use and by making them available at the right times. In the light of the principles of diminishing gratification and of time-preference it is clear that the amounts in which, and the times at which, goods are available have an essential bearing on their values. Money is the most successful device ever discovered for distributing the supplies of a journey along its course, and the goods of daily need over a period of time. The use of money as a storehouse of value by hoarding it is merely a more extreme case of keeping income until a time when it will have a greater value to the owner than it has in the present.[1]

§ 4. **Relative importance of money.** Because money is the general expression of purchasing power, and comes to symbolize all other wealth, it often assumes undue and exaggerated importance in men's eyes. Money is but one of many forms of wealth. It constitutes but a small percentage of the total wealth of a country, and it is far from being the most indispensable to human welfare. Yet its importance, as a whole, in determining the form of industrial organization is enormous. In a society without money, industrial processes would be very different, and trade would be hampered in manifold ways.

[1] The old-fashioned miser, however, withdraws his hoarded gold for the time from its usual monetary function as an indirect agent and treats it as a direct good yielding to him psychic income by its mere possession.

A poor community has little money because it cannot afford more; it gets along with less money than is convenient just as it gets along with fewer agents of every other kind that it could use. Pioneers in a poor community where the average wealth is low cannot afford to keep a large number of wagons, plows, good roads, or schoolhouses. If the members of the community were wealthy enough each would have more of these and of other things, and the sum total of money would be greater. Great as is the convenience of money, poorer communities have to do with little of it. It is, therefore, a confusion of cause and effect when poor communities imagine that their poverty is due to lack of money.

§ 5. **Concept of the individual monetary demand.** Let us now seek to get in mind the idea of an *individual monetary demand,* as that amount of money which at any time is required by an individual to make his purchases in expending his income. Every man may be thought of as having an average monetary demand, or his average individual cash reserve, throughout a period. A man with a salary of $50 a month paid monthly has ordinarily a maximum monetary demand of $50. If his expenditures are made in two equal parts, the one on pay-day, the other thirty days later, his average monetary demand during the month is a little over $25. If most of his purchasing is done in the first week of the month, his average monetary demand may be perhaps $10. Many a workman purchases on credit, running accounts at the stores for a month. Then on pay-day he spends his entire month's wages the day he receives it, and goes without money for the rest of the month. His average monetary demand throughout the month would then be about equal to one day's wages. Evidently any person's cash reserve may be expressed as that proportion of his income that is to him of more value retained in money form for any period than if at once expended.

In this conception of the individual monetary demand, must, however, be included not merely the demands of retail pur-

chasers, made by themselves, but also those of all agencies such as merchants, bankers, and transportation companies, serving the needs of ultimate consumers of goods. The use of money may be necessary several times before a commodity completes its journey from producer to consumer.

Of two persons whose expenditures of money are of the same kind and made at the same rate, the one having the larger amount of purchases to make has the larger monetary demand. But the amount of purchases does not always vary directly with the amount of real income [2]; for example, a farmer and a village mechanic may have at their disposal incomes equal in the quantities of goods, such as food, fuel, clothing, and house-uses (worth, let us say, $1000 for each), but the farmer would be getting a larger part of his goods directly from his farm and by his own labor, while the mechanic would be getting first a money income to be expended afterward for food, clothing, and rent. The mechanic would in this case have an average monetary demand much larger than the farmer.

We see thus that a person's monetary demand at any time is that amount of money which rests in his possession as the necessary condition to making his purchases as he desires. Individual monetary demand varies in proportion directly to the delay, and inversely to the rapidity with which the individual passes the money on; and directly to the amount of the person's income that is received and expended in monetary form.

§ 6. **Concept of the community's monetary demand.** The monetary demand of a community at a given time is the sum of the monetary demands of the various individuals and enterprises. It is that stock of money which is necessarily present to effect the exchanges of the community in the prevailing manner at the existing price level. A single dollar as it circulates helps to supply the monetary demand of many individuals in turn: the more quickly each person spends the

[2] See on kinds of income, Vol. I, p. 26 ff.

piece of money he receives, the greater its rapidity of circulation. Let us suppose that every piece of money passed from one person to another once each day. Then a dollar would, in the course of a business year (about 300 days), serve to buy (and at the same time to sell) $300 worth of goods. If the average purchases of each individual amounted to $1000 a year, the average monetary demand of each would be about 3⅓ dollars.

But every moment beyond the average time that any one kept money would increase his monetary demand. If he delayed a day, a week, or a month in spending the money, waiting until he could buy in some other market, or until a better time to buy, he would thus increase insomuch the amount of money needed to make the trade (on that scale of prices). It requires more slow dollars than swift dollars to make a given volume of purchases.

Evidently the times of maximum monetary demand of the different individuals do not coincide; rather they alternate with each other, and the community's total monetary demand at a given time is a composite of the many individual variations. The amount of money that will remain in circulation in a community depends on several factors, the chief among them being the amount of goods to exchange, the methods of exchange, and the prevailing scale of prices. The amount of goods to be exchanged may change even when the amount produced is unaltered (e.g., a change from agricultural to industrial conditions). The methods of exchange may alter so as to require either more money (e.g., cash instead of credit business), or less money (e.g., use of bank checks displacing use of money by individuals). Or, apart from the other factors, the scale of prices may change as the conditions of gold and silver production are altered. The interrelations of gold and silver production, paper money issues, banking growth, and money-inflow and outflow in foreign exchanges give rise to the most interesting and important problems in the field of monetary theory.

§ 7. **The money-material in its commodity uses.** We are now prepared to take up the question: What determines the ratio at which money exchanges for other goods? And, as money comes to be the unit in which prices are generally expressed, the question becomes: What determines the general level of monetary prices? We have this problem in its simplest form in the case of a commodity-money such as gold. It may be looked upon merely as so much precious metal. The problem of its value as bullion is the same as that of the value of pig iron or of zinc, of meat or of potatoes. There is here no special monetary problem. The value of gold as bullion and its value as money are kept in equilibrium by choice and by substitution. The several uses of gold are constantly competing for it: its uses for rings, pens, ornaments, championship cups, photography, dentistry, delicate instruments, and as a circulating medium. If the metal becomes worth more in any one use, its amount is increased there and is correspondingly diminished in other uses.[3]

When coinage is free and gratuitous [4] the standard money is a commodity. Such coinage is essentially but the stamp and certificate that the coin contains a certain weight and fineness of metal. Where coinage is free and gratuitous each coin will be worth the same as the bullion that is in it so far as the citizens exercise their choice. They will not long keep uncoined metal in their possession when it is worth more in the form of money, nor will they long keep money from the melting-pot when it is worth more as bullion. Yet there may be a slight disparity between the bullion value and the monetary value before the metal is converted into coin or the coin melted down into metal.

This adjustment of the value of commodity-money to other

[3] See secs. 1 and 2 of this chapter; also Vol. I, especially pp. 31–38 and 353–355.

[4] This means actually gratuitous, for any real difficulty in getting metal to or from the mint operates as a cost in the conversion of bullion into money, or *vice versa;* e. g., the gold may be in Australia and the mint in London.

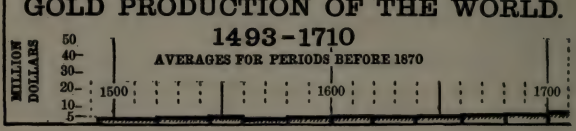
things is made also on the side of supply, in the use of labor and material agents to produce the precious metals and to produce other things. Gold-mining, for example, is one among various industries to which men may apply their labor and their available material agents. Some mines are superior, others medium, others marginal which it barely pays to work. There is, therefore, a rise and fall of the margin of gold production with changes in prices and changes in the cost of production. Large new deposits of gold are discovered from time to time and new methods of extracting gold are invented. If, when it barely pays to work a mine, such changes occur, gold becomes worth less, and the poorer mines eventually must go out of use. As gold rises in value some abandoned mines again come into use. A similar variation may be noted in the utilization of marginal land, marginal factories, marginal forges, and marginal agents of every kind.[5]

§ 8. **The general level of prices.** We come now to a more peculiar aspect of the monetary value problem. In performing its function as general medium of trade, money determines the general level of monetary prices. We have the idea of a general level of prices whenever we contrast the price ratio of money to other commodities at one time with its ratio at another time. Now the monetary prices of the various com-

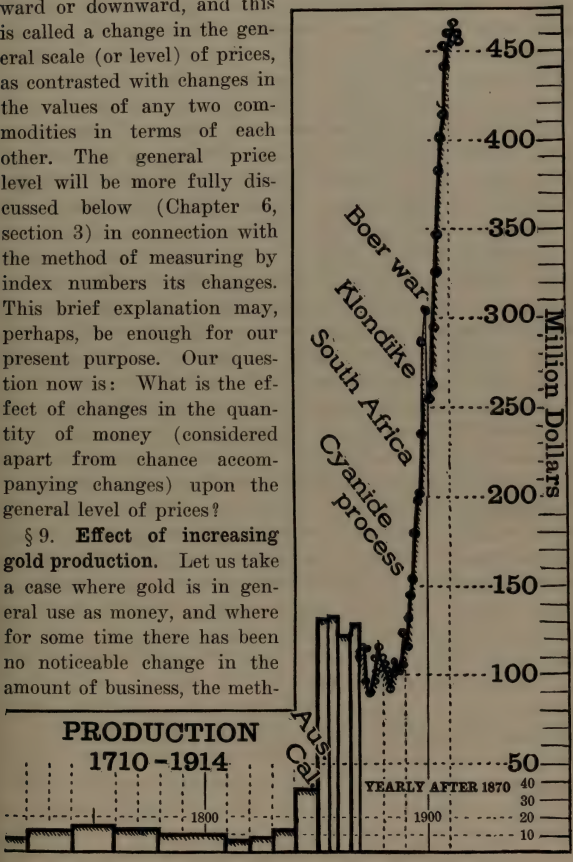
[5] See Vol. I, pp. 138 ff. and 361 ff.

Fig. 1. Gold Production of the World, 1493–1914.

The changes in gold production here shown have bearings not only upon problems of money, but in some respects upon nearly every modern economic problem. Compare in the present connection this figure with Figure 3, in Chapter 6, Section 4, showing changes in index numbers of prices.



modities are constantly changing, and in somewhat different degrees, but on the average there may be a general trend upward or downward, and this is called a change in the general scale (or level) of prices, as contrasted with changes in the values of any two commodities in terms of each other. The general price level will be more fully discussed below (Chapter 6, section 3) in connection with the method of measuring by index numbers its changes. This brief explanation may, perhaps, be enough for our present purpose. Our question now is: What is the effect of changes in the quantity of money (considered apart from chance accompanying changes) upon the general level of prices?



§ 9. **Effect of increasing gold production.** Let us take a case where gold is in general use as money, and where for some time there has been no noticeable change in the amount of business, the meth-

ods of trade, and the general scale of prices. What would happen when new gold mines were found that were much easier to operate, and gold began to be produced at a much more rapid rate than formerly? The amount of gold as compared with other forms of wealth evidently would be increased. What if all the increase went into the industrial arts? The value of gold in its industrial uses would fall. Then a part of the increase must be diverted to monetary uses. When any man, by reason of the increasing gold supplies, gets a larger stock of money than he had before, the proportion formerly existing between his use for money and his monetary stock is altered. He has more money than meets his monetary demand at the existing prices. As he seeks to reduce his stock of money to due proportions by buying more goods, he thereby distributes a part of the excess of money to others. This bids up the prices of goods further until the total value of goods exchanged again bears the same ratio as before to the average monetary demand of each individual.

Take an extreme case: if twice as many dollars get into circulation in a community, either some few men may have far more dollars than before, while others have nearly the same number; or every man may have his due proportion of the new supplies, just twice as many as before in proportion to his income. The latter result, "other things being equal," is the logical one after equilibrium has been restored. If prices of goods remained the same as before, there would be twice as many pieces of money available to effect the same number of trades at the same prices. There is no reason why each person should tie up twice as large a proportion of his income in the form of money. If, however, there is a concerted movement to spend the surplus money, there results a general bidding down of the value of money, a general bidding up of the prices of goods. At what point will this movement stop? The rational conclusion must be that, other things being equal, the new equilibrium will be established when the ratio between the value of money and the price of the goods

which each individual is purchasing becomes the same as before. The money being doubled, prices must be doubled, and likewise for any other change in quantity.

§ 10. **The quantity theory of money.** This explanation of the effect of changes in the quantity of money in a country upon prices (the general scale of prices) is known as the quantity theory of money. This theory has, for a century, been very generally accepted by competent students of the money problem. It may be summed up thus: other things being equal, the value of the monetary unit, expressed in terms of all other commodities, falls as the quantity of money increases, and *vice versa*. That is, prices rise and fall in direct proportion to changes in the total quantity. This is a simple explanation of a complex and difficult set of conditions. The phrase, "other things being equal," betokens the statement of a tendency where there are several factors. The quantity theory explains what happens when there is a change in one of the factors—the number of pieces of money. There are three large sets of facts to be brought into relationship with each other in the quantity theory: (1) the amount of business, or the number of trades effected; (2) the rapidity of circulation, depending on the methods by which business is done; (3) the amount of money available. According to the quantity theory we must expect that, when conditions (1) and (2) remain fixed, the value of money will vary inversely as its quantity. This quantity theory may be expressed in the formula $P = \frac{MR}{N}$ when P is the symbol for price, or the general price level, N is (1) above, R is (2), and M is (3). P, therefore, changes directly with either M or R, or inversely with N.[6]

§ 11. **Interpretation of the quantity theory.** The quantity theory must be carefully interpreted to avoid various misun-

[6] This formula is presented by E. W. Kemmerer in "Money and Prices" (2d ed., 1909), p. 15 ff.

derstandings of it that have appeared again and again in economic discussion.

(1) It does not mean that the price level changes with the absolute quantity of money, independently of growth of population and of the corresponding growth in the volume of exchanges.

(2) It is not a mere per capita rule to be applied at a certain moment to different countries. For example, Mexico may have $9 per capita and the United States $35, while average prices may not differ in anything like that proportion. But in these two countries not only the amounts of exchanges per capita but the methods of exchange and the rapidity of the circulation of money differ greatly.[7]

(3) It cannot be applied as a per capita rule to the same country through a series of years, without taking account of the many changing factors. It is estimated that in 1800 the money stock was about $5 per capita in the United States, and in 1914 about $35,[8] but average prices have not necessarily changed in the same ratio. In a period of years a country may change in a multitude of ways, in complexity of industry, modes of exchange, transportation, wealth, and income. These changes require, some larger, others smaller, per capita amounts of money to maintain the same level of prices. For example, the substitution of cash payments for book-credit in retail trade calls for a larger per capita stock of money; whereas an increased use of banks and checking accounts, by economizing the use of money, enables a smaller amount of money to maintain the same level.[9]

[7] See above, ch. 3, sec. 6, table.

[8] PER CAPITA CIRCULATION OF MONEY (ESTIMATED) IN THE UNITED STATES IN VARIOUS YEARS.

1800.....	$4.99	1850.....	$12.02	1890.....	$22.82
1810.....	7.60	1860.....	13.85	1900.....	26.93
1820.....	6.96	1870.....	17.51	1910.....	34.33
1830.....	6.78	1880.....	19.41	1915.....	35.44
1840.....	10.91				

[9] On the function of deposits, see below, ch. 7, sec. 11.

(4) Tho applied originally to standard money, the quantity theory applies to all other kinds of money circulating side by side and at a parity of value, so far as these fulfil the definition of money and are not merely supplementary aids of money. These substitutes for, or supplements to, money enable each dollar to do more work, to circulate more rapidly. If the standard money alone were doubled in quantity, while the various forms of fiduciary money (smaller coins, bank notes, government notes) remained unchanged, the quantity of money as a whole would not be doubled. Indeed, in such a case, the method of exchange would be greatly altered. According to the quantity theory, therefore, prices would not be expected to double.

§ 12. **Practical application of the quantity theory.** Despite the number of changing factors affecting the methods of exchange and the amount of business, the quantity theory is a rule usable at any moment. These various factors change slowly, and the quantity theory answers the question: What general change occurs in prices as a result of the increase or decrease of the money in a given community at a given moment? Like the law of gravitation and the law of projectiles, the theory must be interpreted with relation to actual conditions.

The quantity theory makes intelligible the great and rapid changes in prices which have followed sudden changes in the quantity of money. Inductive demonstration of broadly stated economic principles is usually difficult, but there have been many "monetary experiments" to teach their lessons. Many inflations and contractions of the circulating medium have occurred, now in a single country, again in the whole world; and the local or general results have helped to exemplify richly the working of the quantity principle. With the scanty yield of silver and gold mines during the Middle Ages, prices were low. After the discovery of America, especially in the sixteenth century, quantities of silver flowed into Europe. The great rise of prices that occurred was explained by the

keenest thinkers of that day along the essential lines of the quantity theory, tho there were many monetary fallacies current at that time. The experience in England during the Napoleonic wars, when the money of England was inflated (by the forced issue of large amounts of bank notes) and prices rose above those of the Continent, led to the modern formulation of the theory by Ricardo and others about 1810. The discovery of gold in California and Australia in 1848–50 greatly increased the gold supply, and gold prices rose throughout the world. Between 1870 and 1890 the production of gold fell off while its use as money increased greatly, and prices fell. A great increase of gold production has occurred in the period since 1890. In part the rising prices since 1897 are explicable as the periodic upswing of confidence and credit, but in the main doubtless they are due to the stimulus of increasing gold supplies.[10] These are but a few of many instances in monetary history, which, taken together, make an argument of probability in favor of the quantity theory so strong as to constitute practically an inductive proof.

[10] Consult Figure 1 in ch. 4 and Figure 2 in ch. 6 for the graphic presentation of these and related facts.

CHAPTER 5

FIDUCIARY MONEY, METAL AND PAPER

§ 1. Commodity and fiduciary defined. § 2. Present monetary system of the United States. § 3. Saturation point of fractional money. § 4. Light-weight fractional coins. § 5. Worn coins and Gresham's law. § 6. A general seigniorage charge on standard money. § 7. Coinage on governmental account. § 8. The gold-exchange standard. § 9. Nature of governmental paper money. § 10. Irredeemable paper money. § 11. Theories of political money.

§ 1. **Commodity and fiduciary defined.** The actual moneys in circulation in every modern country consist of a wide variety of pieces, differing in denomination, physical size, shape and materials, mode of issue, source or authority of issue, and legal character. Among these kinds, one is the standard and is a commodity-money.[1] In such cases the coinage is free and nearly gratuitous, and the value of the money is kept close to parity with its value as bullion by changing bullion into coin, or coin back into bullion, whenever there is an appreciable difference between the values in the two uses. This adjustment is brought about by the free action of the people. The government, having declared what is the standard money unit, and having provided a mint to make coins, leaves it to citizens, acting from the ordinary competitive motives, to decide when they will reduce or increase the number of coins in circulation.

The other kinds of money are not commodity-money and the materials of which they are made, whatever they be, are not

[1] The problem of a legally authorized double standard, bimetallism, is treated in the next chapter. An irredeemable paper money may be, for a time, the standard money.

worth as much in any other uses as they are in their present monetary form. Their value is always referred to, and adjusted to, that of the commodity-money, so long as any of it is in circulation. In contrast with commodity-money, these other kinds may be called fiduciary money. By fiduciary money we mean money that has not a commodity value equal to its money value, but which is generally accepted because each receiver has faith that others in turn will take it in the same way.[2]

§ 2. **Present monetary system of the United States.** Here is given a summary of the main features marking the present monetary system of the United States (in 1915).

Not all this variety is essential to an efficient monetary system, and several of the kinds survive as the result of historical accidents (political and legislative). But all are now kept in accord with the value of the gold coin which, it will be observed, is the only kind the amount of which is not artificially limited. Silver dollars are no longer coined, subsidiary silver and minor coins are issued only in exchange for other money, as are gold and silver certificates in exchange for gold or for silver, which they merely represent while in circulation.

§ 3. **Saturation point of fractional money.** Fiduciary money is that on which regularly the issuer makes a seigniorage charge.[3] Let us consider now the effect of seigniorage on the value of money.

Fractional coins are those of smaller denominations than the standard unit of money, as shillings and pence in Eng-

[2] The faith (*fides*) is not always that the issuer of the money (whether it be a bank or the government) will redeem the money on demand at any future time; for fiduciary money may circulate while irredeemable, that is, either carrying no promise of redemption in the standard money or in fact not being redeemed. Yet undoubtedly actual redemption on demand or a good prospect of future redemption is one of the circumstances stimulating the faith and the readiness of each person in turn to receive fiduciary money.

[3] In the broad sense as above defined, ch. 3, sec. 10.

MONETARY SYSTEM OF THE UNITED STATES, 1915

	Metals	*Weight, grains*	*Fineness*	*Ratio to gold*
1.	Gold coins	25.8	.90	100
2.	Silver dollar	412.5	.90	15.988 to 1
3.	Silver, subsidiary	385.8	.90	14.953 to 1
4.	Nickel (5 cents)	77.0	.25	.....
5.	Copper (1 cent)	48.0	.95	.....

	Metal	*Limit of issue*	*Legal tender for private debts*	*Receivable for public dues*
1.	Gold coins	Unlimited.	Unlimited.	For all
2.	Silver dollar	Ceased in 1905	Unlimited.	For all
3.	Silver, subsidiary	Needs of the people.	$10	$10
4.	Nickel (5 cts.)	Do.	25 cts.	25 cts.
5.	Copper (1 ct.)	Do.	25 cts.	25 cts.
	Paper			
6.	Gold certificates	Unlimited in exchange for gold coin.	No	For all
7.	Silver certificates	In exchange for silver $	No	For all
8.	U. S. notes	No new issues.	Unlimited.	Except customs
9.	Treasury notes of 1890	No new issues.	Unlimited.	For all
10.	National bank notes.	Capital of banks	No	Except customs
11.	Federal reserve notes	Per cent. of gold reserves.	At banks of reserve system	For all

	Metal	*Exchangeable at treasury for.*	*Redeemable at treasury in*	*In circulation Oct. 1, 1915*
1.	Gold coins	Gold certificates, U. S., Treas., or Fed. res. notes.		616,000,000
2.	Silver dollar	Silver certificates		65,000,000
3.	Silver, subsidiary	Minor coins	Lawful money,[a] in sums or multiples of $20	162,000,000
4.	Nickel		Do.	62,000,000 [d]
5.	Copper		Do.	
	Paper			
6.	Gold certificates	Subsidiary and minor coins	Gold coin	1,172,000,000 [e]
7.	Silver certificates	Silver and minor coins	Silver dollars	482,000,000 [f]
8.	U. S. notes	Subsidiary and minor coins	Gold	337,000,000
9.	Treasury notes of 1890	Silver and minor coins	Gold	2,200,000
10.	National bank notes.	Subsidiary silver and minor coins	Lawful money [b]	761,000,000
11.	Federal reserve notes	Gold [c]	Gold [c]	133,000,000
	Total [g]			3,792,200,000

[a] "Lawful money" includes gold coin, silver dollars, U. S. notes, and Treasury notes.

[b] Redeemable also in lawful money at bank of issue.

[c] Redeemable also at Federal reserve banks in gold.

[d] Not usually included in the estimates of total money in circulation.

[e] Represented dollar for dollar by gold kept in the U. S. treasury.

[f] Represented dollar for dollar by silver kept in the U. S. treasury.

[g] Besides, there were about $312,000,000 in the U. S. Treasury not offset by outstanding paper. The total money stock (in circulation and in the Treasury, eliminating certificates representing gold and silver), was about $4,233,000,000, of which 70 per cent was metal (largely represented in circulation by paper certificates) and 30 per cent was paper. Of the 70 per cent 50 was gold, 18 was silver, and 2 was copper and nickel.

land, and half dollars, quarter dollars, dimes, nickels, and cents in America. Money to serve well a variety of uses must be of different denominations, and "small change" is necessary to make small purchases and for exact settlement in larger payments that are not multiples of the standard unit. The amount required (or most convenient to use) in each denomination of fractional coins is thus a more or less certain portion of each person's monetary demand, shaped by experience and fixed by habit. For example, within certain elastic limits of convenience quarters may be used for halves, and dimes for nickels (and *vice versa*); but each person has a point of preference. The total demand for each kind of change is the sum of the individual demands. This point where the amount of coins of any denomination (in relation to the whole monetary system) is most convenient may be called the saturation point of that kind of small change, up to which point the people prefer a share of their money in that form, and beyond which they will, if free to choose, exchange that kind for other denominations (smaller or larger). Each kind of money, as the cent, nickel, dime, has its own peculiar demand and its saturation point.

§ 4. **Light-weight fractional coins.** The standard metal is usually too valuable to be suitable for coins of the smaller denominations. Therefore, when gold is the standard, copper, nickel, and silver remain in restricted use. But when coins of these metals are issued at weights corresponding with their bullion value, difficulties arise. Not only are they too heavy for convenience, but with every slight rise in their bullion value as compared with that of the standard metal, they become worth more as bullion than as coin and begin to disappear from circulation. This happened often throughout the Middle Ages and until the nineteenth century. The attempt was generally made to coin gold and silver at a ratio of weight corresponding exactly to their market values at a given moment and, every time the market conditions varied, the best full-weight coins of one of the two metals were taken out of

circulation.[4] The country thus suffered for lack either of the larger gold coins or of fractional coins. At length, to remedy this difficulty, fractional silver coins, often called "token coins," were issued, in limited numbers, of less than full proportionate weight and bullion value.

This plan, having been partially tried, was generally adopted by the United States in 1853 at a time when the silver dollar of 371.25 fine grains was legally rated at the same value as the gold dollars of 23.22 grains, and was freely coined. The fractional coins were made a little over 6 per cent lighter per dollar than the dollar coin; two half-dollars or four quarters or ten dimes contained 93.52 cents worth of silver. Since then silver bullion has become worth much less in terms of gold, and for years past the bullion value of the silver in a dollar of silver small change has been between 40 and 60 cents. Why then has the fractional coinage a monetary value equal to the standard money, dollar for dollar?

The answer is, because it is artificially limited in quantity, so that it does not pass the point of saturation in the field of its use. Its value rests on its monetary use; it is fiduciary money, not commodity-money. It is limited simply by letting "the needs of the people" determine its amount. This is done by issuing it only in exchange for other money of the larger denominations, and by redeeming it in other money on demand. Fractional coins are issued on the request of banks in exchange for standard money. One needing "change" gets it at the bank; when the bank finds its supply falling short it gets more from the government mints. As business increased in 1898, the demand for nickels, dimes, and quarters became unprecedented, and the mints worked night and day to supply them. If these coins were made in great quantities and forced into circulation by the government through paying them out to creditors and officials, their quantity would become excessive and they would fall in value (be at a discount) compared with standard money. But as this is not done, and as, moreover,

[4] See next section on worn coins.

they are redeemed on demand at the treasury (and practically at every bank and post office) in other money, any slight tendency to depreciation in any locality is at once corrected. As it is, the government makes a seigniorage profit on the fiduciary coinage, as shown in the following table.[5] The fractional coinage is maintained at a parity with the standard money in accordance with the monopoly principle, expressed in the limitation of the amount.

Receipts:	
Earnings (charges for refining, assaying, manufacture for other countries, etc.)	$392,000
Bullion recovered, by-products, old materials, etc.	143,000
Profits on seigniorage, subsidiary silver	3,013,000
Profits on seigniorage minor coinage and recoinage	2,387,000
Total receipts	$5,935,000
Expenditures:	
All kinds	$1,138,000
Net revenues from mint service	$4,797,000

§ 5. **Worn coins and Gresham's law.** Coins may be lightweight as the result of another cause—namely, the abrasion (wearing off) of the coins in circulation. Nearly always when this has occurred the worn coins have still been accepted as money,[6] and ordinarily without any depreciation. That is to say, they have a value as money greater than the value of the bullion that is in them. Everybody takes them without hesitation as readily as if they were full weight. If, however, at this point, new full-weight coins are put into circulation, these at once disappear while the old ones remain in circulation—a fact that has always been somewhat mystifying.

In explanation of this phenomenon was formulated "Gresham's law" of the circulation side by side of coins of different bullion value: bad money drives out good money. Sir Thomas

[5] Receipts and Expenditures of Mint Service in 1914:

[6] It makes no difference what may be deemed the cause of their acceptance; whether it be habit, public opinion in business circles, or the act of law making them a legal tender; the essential thing is that they continue to be accepted as money.

Gresham (whose name has but recently been given to this so-called law), explained the principle to Queen Elizabeth when counseling her regarding the recoinage of the debased money of the realm as was done in 1560. He showed that when old, worn coins were in circulation and the mint began putting out full-weight coins, the old lighter ones remained as money, while the new ones, being heavier, were picked out by jewelers and by those needing to send money abroad.

Gresham's law has a paradoxical wording and is frequently misunderstood. "Bad" money means not counterfeit money, but merely money that has not as great a bullion value compared with its money value as some other kind of money then in circulation. But not every piece of such money will drive out every piece of good money. The law applies only under certain conditions, and within certain limitations. The "good" will be driven out only if the total amount of money in circulation is in excess of what would be needed if all were of full weight and of best quality. Paradoxically speaking, if there is not too much of the bad money, it is just as good as the good money. But even if good money is driven out, it may not leave the country. It may be hoarded, or be picked out by banks and savings-institutions to retain as their reserves, or be melted for use in the arts. Gresham's "law" becomes thus a practical precept. As applied to the plan of recoinage it is: Withdraw the worn coins as rapidly (in equal numbers) as you put new coins into circulation.

The continued circulation of "bad" money along side of "good" money (light-weight along side of full-weight coins), so long as the total number of coins is not in excess of the money demand for full-weight coins, is explained thus on just the same principle as is the circulation at parity of a light-weight fractional coinage, in the preceding section.

§ 6. **A general seigniorage charge on standard money.** The fiduciary coinage problem presents itself under a somewhat different guise in case a seigniorage charge is made on all coinage, even of that metal used as the standard unit. In this

case coinage is free but not gratuitous. In this case no bullion is brought to the mint unless the coined pieces the owners receive have a value equal to the bullion value plus the seigniorage charge. The power to impose a seigniorage charge is a monopoly power. Artificial limitation is present. Evidently, the number of coins that can be issued without depreciation is limited to that number which would circulate if they were made full weight without a seigniorage charge.[7] This number of pieces of full-weight metal is the saturation point of the money demand of the country. If more than that could in any way be put into circulation it would become worth less as money than as bullion, and would be melted or exported.

Assume that this full supply of money at a given moment is 100,000 pieces or dollars; then consider the effect of imposing a seigniorage charge of ten per cent on further coinage. The government alone having the right of coinage, the need of money would give the circulating medium a monopoly value. The value of the money would rise. When it had risen until the coin would buy any more than one-ninth more bullion than was in it, the citizens would begin to take metal to the mint. After the ten per cent charge was taken out they would receive a coin which, tho containing one-tenth less bullion, would be worth very nearly the same as the metal taken to the mint. No considerable depreciation could take place unless the volume of business fell off so that less money was needed than before. In that case there would be no outlet for the excess of coins until they fell to their bullion value, i.e., till they lost the entire value of the seigniorage, the monopoly element in them. Melting or exporting them before that point was reached would cause to the owner the loss of whatever element of seigniorage value they contained. We thus have arrived at the general

[7] In this and following numerical examples no account is taken of the possibility that the standard metal may depreciate in the world market in terms of all other goods as a result of its diminished use as money in one or more countries. This properly belongs in a complete theoretical treatment of the subject.

principle of seigniorage: when the number of coins issued is limited to the saturation point, a seigniorage charge does not reduce their money value; they are worth more as money than as bullion. And this holds good of a large seigniorage charge as well as of a small one, even up to the extreme limit of a charge of 100 per cent. In this last case the government would retain the whole of the bullion brought to it and would give in return a piece of money made of material (metal or paper) with a negligible value.

§ 7. **Coinage on governmental account.** The fiduciary coinage problem may be presented also when coinage is not free, and the times and amount of coinage are determined by law or by legally authorized officials. In this case the bullion must be obtained by purchase in the open market (and paid for by some form of legal money, or by bonds). Coinage is then said to be "on governmental account."

Now, assuming that the normal money-demand (the volume of business, or sum of exchanges) remains unchanged, let us consider what will result if the government begins to issue money in this way, when, as in the preceding case, 100,000 units of full-weight money are in circulation. This action might be taken most simply by recoining all the full-weight pieces that came into the treasury, making them contain $\frac{1}{10}$ less precious metal, and paying out 1111 pieces for every 1000 received. Every time this was done there would be an excess of 111 pieces above the normal money-demand, and 111 full-weight pieces would be exported or melted (Gresham's law). The process (in strict theory) may be repeated 90 times, at which point 90,000 full-weight coins have been received, 100,000 light-weight coins have been issued to take their place and 10,000 full-weight coins have gone out of circulation. The total seigniorage charge would be 1-10 of 90,000, or 9000 units. No depreciation has taken place, and the pieces, by reason of their limitation, bear a money value in excess of the bullion that is in them.

Now the government, with the next 1000 pieces collected by

taxation, could buy enough bullion (in the open market) to make another 1111. The excess of 111 pieces could not now be promptly removed by the melting down or exporting of 111 coins, for all those remaining in circulation have a bullion value $\frac{1}{10}$ below their money value. As this process is repeated the excess must continue to grow from 100,000 to 111,111, and the value of the money piece in terms of bullion continue to fall from 10 to 9. At this point the 111,111 pieces would contain just the same amount of bullion and have just the same value as the 100,000 pieces did before. Thereafter no further profit would accrue to the government from issuing coins of that weight. To make a further profit it must again reduce the amount of pure metal in the coin.

This process was often repeated in the Middle Ages. A ruler, either by making a higher seigniorage charge or by coining on his own account, debased the quality or reduced the weight of the money of his realm. For a time the new coins, having the same monetary use, circulated at par with the old coins. The ruler, pleased with this almost magical power of getting a revenue with little trouble, continued to issue coins until suddenly the heavier coins began to be exported or melted, and the value of the other money fell, to the mystification alike of the prince and of his people. The reason is now perfectly plain: the number of coins was not kept within the proper limits and they went down to their bullion value. The only way a further profit could be made in this way was to debase the coin again. By successive steps the coinage came to consist almost entirely of cheaper alloy.

§ 8. **The gold-exchange standard.** In a number of silver-using countries and colonial dependencies near the end of the nineteenth century, the fluctuations of the value of silver in terms of gold was a constant source of difficulty in the payment of foreign obligations to gold standard countries. Yet there were strong reasons in the habits of the people and in the industrial conditions of the country to forbid the adoption of gold and the disuse of silver as the actual money in circulation.

The method adopted, that of the gold-exchange standard, involved these features.

(1) Closing the mints of the country to the free coinage of silver, as was done most notably in India in 1893 and in Mexico in 1904.

(2) Adoption of a fixed ratio of exchange between the silver coins in circulation and some gold coin which is made the standard of value in all transactions (as the dollar or the pound sterling), the money in circulation thus being all or nearly all of a fiduciary nature.

(3) Regulation and limitation of the amount of money in circulation so that a fixed parity between it and gold may be maintained (a) by the limited issue of coins only on governmental account, (b) by the sale, at a fixed rate, of foreign exchange bills payable abroad in the standard unit, the money paid for the bills being withheld from circulation in a special reserve, (c) by the purchase of foreign bills of exchange at a fixed rate, thus paying out and putting again into circulation some of the fiduciary money in the special reserve.

These monetary changes furnish numerous illustrations and demonstrations of the quantity theory of money as applied to the entire circulating medium of a country.[8]

§ 9. **Nature of governmental paper money.** The problem of seigniorage presents itself in its most extreme form when money is made of paper. Paper money is issued either by a government or by a bank. We will consider governmental notes here, reserving until Chapter 7 the case of bank notes.

The issue of paper money in some cases grew out of the practice of debasing metal. However this may have been, governmental paper money may be looked upon as money for which a seigniorage of one hundred per cent is charged. The gain of seigniorage from paper money is greater and is just as easily

[8] See "Modern Currency Reforms" (1916), by E. W. Kemmerer, professor of Economics and Finance in Princeton University, for a detailed treatment of this remarkable series of monetary changes, probably unequaled in instructiveness to the student of monetary theory.

secured as that from coinage of metals. Governmental paper money is called "political money," in contrast with commodity money. However, all coins that contain an element of seigniorage, or monopoly value, are to that degree "political money." The typical paper money is irredeemable; that is, it cannot be turned into bullion money on demand. It is simply put into circulation, usually with the "legal-tender" quality. Money has the *legal-tender* quality (as the term is used in the United States) when, according to law, it must be accepted by citizens as a legal discharge for debts due them, unless otherwise provided in the contract. The prime purpose of making money legal tender is to reduce the danger of dispute as to payments; but another purpose often has been to force people to use a depreciated money whether they would or not. The purpose of the issue of political money is usually to gain the profit of seigniorage for the public treasury, and often it has been the desperate expedient of nearly bankrupt governments. Governmental paper money differs from bank notes in that its value does not necessarily depend on the promise of redemption by the issuer. It differs from promissory notes and bonds in that its value is not based on the interest it yields, but mainly on its monetary uses. The issue of paper money may save the government the payment of interest on an equal amount of bonds. The promise to receive paper in payment for taxes or for public lands may help to maintain its value by reducing its quantity, but nothing short of its prompt redemption in standard coins makes it truly redeemable.

§ 10. **Irredeemable paper money.** The most notable examples of paper money in the eighteenth century were the American colonial currencies, the continental notes, and the French assignats. In all the American colonies before the Revolution, notes or bills of credit were issued which were in most cases legal tender. Parliament forbade the issues, but to no effect. Without exception they were issued in large amounts and without exception they depreciated. The conti-

nental notes were issued by the Continental Congress in the first year of the war (1775), and for the next five years. The object at first was to anticipate taxes, and it was expected that the states would redeem and destroy the notes, but this was not done. The notes passed at par for a time, but depreciated rapidly as their number increased. It has been estimated that the country had less than $10,000,000 of coin before the war, and when, in 1780, over $200,000,000 of notes were in circulation they were completely discredited: hence the phrase "not worth a continental." Specie then quickly came back into use. A few years later the leaders of the French Revolution, failing to learn the lesson of the American experience, issued, on the security of land, notes called assignats in such enormous quantities that they became worth no more than the paper on which they were printed. The paper money issued under the English bank restriction act of 1797-1820 is especially notable because it gave rise to the controversy which did much to develop the modern theory of the subject. Parliament forbade the Bank of England to redeem its notes in coin because the government wished to borrow the coin the bank held. The result was the issue of a large amount of bank money not subject to the ordinary rule of redemption on demand. It was virtually governmental paper money. The notes depreciated and drove gold out of circulation, and it was not until 1821 that specie payments were definitely resumed.

The United States, under the Constitution, did not try legal-tender paper money till 1862 when paper notes (called greenbacks, because of the color of ink with which the reverse side was printed) were first issued, later increased to a total of about $450,000,000. Other interest-bearing notes were issued with the legal-tender quality and circulated as money to some extent. Greenbacks depreciated in terms of gold, and gold rose in price in terms of greenbacks until, in June, 1864, it sold at 280 a hundred. Fourteen years elapsed after the war before these notes rose to par, in terms of gold (in De-

cember, 1878), and they became legally redeemable in gold January 1, 1879. This was called "the resumption of specie payments."

Almost every nation has at some time issued political money. During the Franco-Prussian War in 1870, France, through the medium of its great state bank, made forced issues of notes of a political nature, which only slightly depreciated. Many countries—Russia, Austria, Portugal, Italy, and most of the South and Central American republics—have had or still have depreciated paper currencies.

At once, at the outbreak of the great war in 1914, the governments of the warring nations began to exercise a strict control over the issue of paper money, sought to gather into the public treasury all the specie, and to give paper (either governmental notes or bank notes) practically a forced circulation, making it almost the sole circulating medium. The values of the paper moneys have fallen in all the countries, especially in Germany and Russia. In such cases the money partakes somewhat of the characters both of bank notes and of political money. Resorted to in desperate extremities, political money has usually proved to be a costly experiment. A result usually unintended is the derangement of business and of the existing distribution of incomes. The rapid and unpredictable changes in prices gives opportunity for speculative profits, but injure legitimate business. This incidental effect on debts and industry offers the main motive to some citizens for advocating the issue of paper money. It is peculiarly liable to be the subject of political intrigue and of popular misunderstanding. It is this danger, more than anything else, which makes political money in general a poor kind of money.

§ 11. **Theories of political money.** There are two extreme views regarding the nature of paper money, and a third which endeavors to find the truth between these two. First is that of the cost-of-production theorists, who declare that government is powerless to influence value, or to impart value to paper by law. They deny that there is any other basis for

the value of money than the cost of the material that is in it. Money made of paper, on a printing press, has a cost almost negligibly small, and, therefore, they say it can have no value. The facts that it does circulate and that it is treated as if it had value are explained by the cost-of-production theorists as follows: while the paper note is a mere promise to pay, with no value in itself, it is accepted because of the hope of its redemption, just as any private note. Depreciation, according to this view, is due to loss of confidence; the rise toward par measures the hope of repayment.

Taking a very different view, the extreme fiat-theorists assert that the government has unlimited power to maintain the value of paper money by conferring upon it the legal-tender quality. The meaning of *fiat* is "let there be," and the fiat-money advocates believe that the government has but to say, "Let there be money," to impart value to a piece of paper. The typical fiat-money advocates in the United States were the "Greenbackers," who wished to retain the greenbacks issued in the Civil War and to increase the amount greatly. They saw in paper money an unlimited source of income to the government. They proposed the payment of the national debt, the support of the government without taxes, and the loan of money without interest to citizens. All might live in luxury if the extreme fiat-money theorists could realize their dreams. The depreciation that has taken place in nearly every case where government notes have been issued, the fiat-theorists declare to be due to a mild enforcement of the law of legal tender. To them the fact that paper money may circulate for a time at par appears a reason why it always should. They do not recognize that there is a saturation point in the use of money, and that its use is still further limited by the fear of larger issues.

The almost universally accepted opinion among economists rejects both of these views, tho recognizing in each a certain limited aspect of the truth. The cost-of-production view quite overlooks the features in which paper money differs from or-

dinary credit paper. The value of one's promises to pay depends on his reputation and his resources; the resources constitute the basis of value. Bonds have value because they yield interest and are payable at a definite time in standard money. But paper money, lacking this basis for its value, has another basis in its money use, in its power to buy goods.

The theory of paper money here outlined makes the value of paper money a special case of monopoly value. As the power of any private monopoly over price is relative, not absolute, so is that of the government over the value of political money. The money use is the source of value of the paper notes. It is this which gives the economic condition for value in paper money and strictly limits the power of the government—a fact overlooked by the fiat-theorists. Business conditions remaining unchanged, the limit of possible issue without depreciation is the number of units in circulation before the paper money was issued, the saturation point of full-weight and full-value coins. Whenever governments have failed to stop at that point, paper money has depreciated. But under wise and honest control and regulation political paper money might serve the monetary function very effectively.

CHAPTER 6

THE STANDARD OF DEFERRED PAYMENTS

§ 1. Relative positions of gold and silver; historical. § 2. Gold production, first half of nineteenth century. § 3. Concept of the general price level. § 4. Index numbers. § 5. Gold production and monetary legislation, 1850 to 1879. § 6. Definition of the standard of deferred payments. § 7. Increasing importance of the standard. § 8. Fluctuating standard and the interest-rate. § 9. Notable changes in prices. § 10. Nature and object of bimetallism. § 11. The movement for national bimetallism in America. § 12. Rising prices after 1896. § 13. Defectiveness of the gold standard. § 14. Various ideal standards suggested. § 15. The tabular standard.

§ 1. **Relative positions of gold and silver: historical.** It is not possible within the limits of our space to enter here into the details of the world's monetary history. It must suffice for our purpose to sketch briefly the period preceding the nineteenth century. Both gold and silver were used as moneys in Europe in the Middle Ages, tho silver was much the more common. The two metals continued to be used side by side in Europe and in the new settlements in America, silver for the smaller and gold for many of the larger transactions. Both were made legalized forms of money (and standards of deferred payments) in units of specified weights and fineness, the weights bearing a certain ratio to each other. Thus it was possible for a debtor to discharge his obligations with that one of the two metals that at the moment was the cheaper at the legal ratio. Fluctuations in the prices of gold in terms of silver were at times such as to cause a large part of the full-weight coins of one or the other metal to leave circulation (in accordance with Gresham's law). So from time to time the ratio was slightly changed by law in the various countries to

permit the circulation or to bring back the kind of money that had been undervalued in terms of the other. But it is a very remarkable fact that from the time of Xenophon until the discovery of America (a period of nearly 2000 years), the market ratio of silver to gold bullion in Europe remained pretty close to 10 to 1, being only temporarily altered by sudden and unusual occurrences. From 1492 to 1660 the ratio changed to 15 to 1, where it remained with remarkable stability until about the year 1800. At the establishment of the mint of the United States in 1792 that ratio was found to exist. Men had come to look upon the ratio of 15 to 1 as the natural order, determined (it was sometimes said) providentially by the deposit of the two metals in due proportion in the earth's surface. But as we now see it, this in part was mere chance and in part was due to the equalizing effect of the wide use of both metals so that the one could be easily substituted for the other in case of a divergence of the market ratio from the legal ratio as money. From the year 1500 until 1800 the Western hemisphere was the main source of the precious metals, the alluvial deposits were widely scattered, were gradually discovered, were usually found in small quantities, and were extracted in primitive ways. The existing stock of precious metals, gold and silver, more than other products of mine and field, is at any time the accumulation of many years' production, and is changed very little, proportionally, by a large change of output in any year or short period. It changes in volume as does a glacier fed by the snows of many years, not as does a river, filled by a single rainfall. For a short time after the discovery of America (from 1493 to about 1544) the average coining value [1] of the world's production of gold, nearly all found in America, was about 1½ times as great as that of silver; but

[1] The amount of silver is here expressed at its coining value; this is not the commercial value, but rather the number of silver dollars 371.25 fine grains weight that could be made out of the silver produced. Silver and gold of equal coining value are, therefore, as to weight always in the ratio of 16 to 1.

thereafter for three centuries from about 1545, the annual value of silver produced was between 1½ to 4 times as great as that of gold, averaging about twice as great. Silver was the money chiefly in use in the ordinary transactions in all of the principal countries of the world.

§ 2. **Gold production, first half of nineteenth century.** We have now to note some great changes in the production of gold in the nineteenth century, changes both absolute and relative to that of silver. The market ratio of the two metals had been gradually changing before 1792 and continued to change. Gold was slowly becoming more valuable in terms of silver and the legal ratio of 15 to 1 in the United States (at which both metals were admitted free to the mint) proved to have undervalued gold. Gold largely left circulation and silver and bank notes formed the greater part of our circulating medium. Then, in 1834, soon after the production of gold had begun to increase somewhat more rapidly than that of silver, the legal ratio of the United States was changed to 16 to 1. This brought a good deal of gold back into circulation and gradually drove out most of the silver (the heavier coins disappearing first).

In the decade 1841–50 the average annual value of the gold production had, for the first time since the early sixteenth century, exceeded that of silver. Then, from 1848 to 1850, came the great gold discoveries in California and in Australia. In 1851 the value of gold produced was one and one-half times that of silver; in 1852 was three times, and in 1853 four times as great; and then slowly declined, but continued every year as late as 1870 to be over twice as great. This caused the displacement of silver by gold and drove out a large proportion of the silver coins of smaller denominations. This led to the law of 1853, authorizing subsidiary coinage (on government account only) of lighter weight.[2] Let us observe the effect on prices that was brought about by the discoveries of 1848–49,

[2] See above, ch. 5, sec. 4.

and, first, we must consider briefly the method of measuring and expressing general changes in prices.

§ 3. **Concept of the general price level.** The price of any good is some other good or group of goods given for it in trade.[3] The standard unit of money coming to be the most convenient expression for price (whether or not money be actually passed from hand to hand in that particular trade), prices usually are monetary prices, and more specifically are prices in gold, or in silver, or in whatever constitutes the standard money unit. But the price of each good is a definite, separate fact, which expresses the ratio at which that commodity is sold. The price of any particular kind of goods may fluctuate in either direction as compared with the prices of other goods at the same

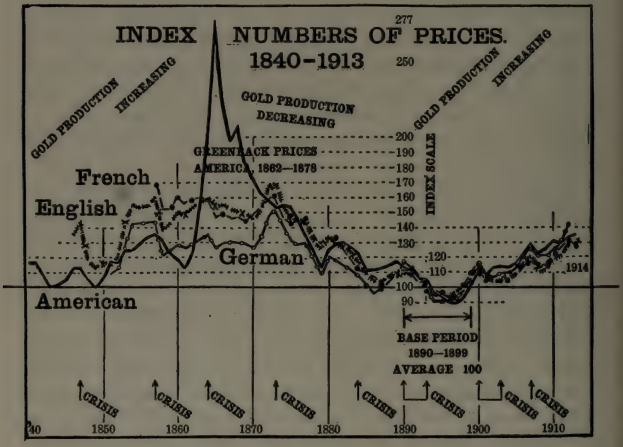


FIG. 2. INDEX NUMBERS OF PRICES. The four series of prices here shown begin at different periods; the American in 1840 (Aldrich report 1840–1889 and Bureau of Labor from 1890 on); the English in 1846; the German in 1851; the French in 1857. We have adjusted

[3] See Vol. I, p. 45 ff. See also above, ch. 4, sec. 8.

time. For example, iron and many other goods may rise while wheat and many other goods fall in price. There is, therefore, no such thing as an actual *general* change in the prices of goods in terms of money, but it may be seen that the prices of large classes of goods, often of nearly all goods, change upward or downward at the same time and in the same general direction. We thus have need to distinguish between changes in the valuations of particular kinds of goods in terms of each other and general changes in the valuation of a number of different goods in terms of the monetary unit.

To get some idea of whether such a general trend occurs, the algebraic sum of all the changes in the particular prices of a selected group of goods may be taken, and for convenience this may be reduced to an average price (by dividing the sum

each of these series to a base of the average prices for 1890–1899, in accord with the basic period used by the American Bureau of Labor.

The reader must be on his guard against misunderstanding the diagram. It does not represent the heights of the prices of the different countries compared with each other either at any one date or for the entire period. For example, the heights of the lines at the year 1860, do not indicate that American prices were lowest and French the highest at that date, or, indeed, tell anything whatever directly on that point. The various series of prices are compared within themselves, every year with the average of the prices for 1890–1899 in each country, respectively. The only comparison allowable, therefore, between the several lines, is that between the fluctuations, both as to their times and as to their directions, both as to the larger tidal movements and as to the lesser wave-like movements within the business cycles. The Figure does indicate that both American and German prices have risen somewhat as compared with the English and French prices, since the period before 1860.

This figure should be studied in connection with Figure 1, in ch. 4, sec. 9, on gold production. The Figures indicate that the rapidly growing monetary use of gold offset a large part of the effects of increasing gold production between 1840–1860 and 1884–1914. Between 1884 and 1896 prices actually continued to fall after gold production had begun to climb. Likewise the growing monetary use of gold accentuated strongly the effects, between 1873 and 1883 of a comparatively small decrease in gold production.

by the number of articles). Such an average is called a general price and, when comparing it with the general price of another time, we speak of changes up or down in *general prices*, or in the *general scale of prices*, or in the *price level*.

When gold is the standard unit, its value is the converse of general prices; as prices go up the value of gold goes down, and gold is said to *depreciate*. As prices go down, the value of gold goes up and gold is said to *appreciate*. Rising prices mean falling value of gold (and at the same time falling purchasing power), and *vice versa*.

§ 4. **Index numbers.** The process of calculating general prices and changes in them has in it, inevitably, something of arbitrariness and incompleteness. For not all prices can be included, but only those of articles of somewhat standardized grades and those that are pretty regularly sold in markets where prices are publicly quoted. Any list of articles that can be selected is of unequal importance to different persons and classes of persons, at different places, at different times, and for different purposes. And yet the study of general prices as shown by any broadly selected list reveals changes which in some measure affect the interests of every member of the community.

General prices are conveniently compared from one time to another through the use of index numbers. An *index number* of any article is the per cent which its price at any certain date is of its price at another date (or of the average for a series of prices) taken as a base or standard. Thus if the average price of cotton in the base year were 10 cents (taken as 100) and the price rose to 12 cents, the index number would be 120. *A tabular index number* is the per cent which the price of a selected group of articles at any certain date is of the price of the same group of articles at a date which has been taken as the base.[4]

[4] Numerous tabular index numbers have been worked out for different countries and periods. The main results of the more recent ones have been brought together with critical comments, by Professor

The principal index numbers of the leading countries are here shown. The fact that from 1862 to 1879 inclusive prices in the United States were expressed in an irredeemable paper standard makes comparisons for that period misleading. A better idea is obtained by using as the base for each of the several series, the average of prices in each country for the years 1890 to 1899.

§ 5. **Gold production and monetary legislation, 1850 to 1879.** The unprecedented increase in gold production between 1849 and 1853, and the continuance of production in volume about four-fold as great as that of the decade 1840–49 was reflected at once in a rise of prices. This was a period of prosperity in business culminating in the crisis of 1857 (felt more or less in all the leading countries). This prosperity accelerated the effect of increasing quantities of the standard money. Credit was stimulated and the rate of circulation and the efficiency of money were increased. Prices rose to a temporary maximum in 1857 and then fell as a great international financial crisis occurred. The great new supplies of gold had been readily taken ("absorbed") into the monetary circulation of the world, to meet the needs of rapidly growing commerce and industry. In the European countries,[5] prices in terms of gold, tho fluctuating somewhat, kept at about the same level from 1860 to 1870. The years 1871 and 1872 were very prosperous and showed rapidly rising prices which reached a maximum in 1873, when a financial panic occurred.

In that very year, just as the gold production for the first time since 1851 had fallen below $100,000,000, several notable changes in monetary legislation were made which made gold more important in the circulation of a number of countries.

Wesley C. Mitchell, in Bulletin 173 of the U. S. Bureau of Labor Statistics, July, 1915, from which the figures here used are quoted.

[5] The price movements in the United States between 1860 and 1879 must be left out of consideration here, for the excessive issues of greenbacks drove gold out of circulation and made greenbacks the standard money, except in California and elsewhere on the Pacific Coast where, by public opinion, gold was retained as the circulating medium.

In 1873 Germany made gold the standard throughout the new German Empire (having prepared the way by legislation in 1871 which made gold a legal tender alongside of silver), and provided that silver was thenceforth to be used only in the subsidiary coinage. The same year Belgium, and the next year the other countries of the Latin Union (France, Switzerland, and Italy) took steps which resulted in demonetizing silver; that is, in limiting its coinage to governmental account, and in making gold their one standard money.

The United States at that time had neither gold nor silver regularly in circulation (except in California), and there was a long-continued discussion of "a return to specie payments," which meant the return to a metallic standard, and the redemption of greenbacks on demand. Meantime in 1873 a law was passed making the gold dollar "the unit of value," and dropping out the standard silver dollar from the list of coins authorized to be issued at the mint.[6] From 1873 until 1879, prices (in greenbacks) were falling in this country very rapidly because the country with the increase in population, wealth, and business, was "growing up to" its unchanging currency supply. For a like reason at the same time gold prices throughout the world were falling. While this country was lowering its level of prices from an inflated paper money to a gold commodity basis, the gold basis itself was sinking to a lower level. The very demand of our treasury and banks for gold caused the retention of our own gold product (which between 1864 and 1876 had been nearly all exported) and required an enormous net importation of gold between 1878 and 1888. This reduced suddenly by one-half the amount available each year from our production for the rest of the world.

§ 6. **Definition of the standard of deferred payments.**

[6] This change was what later was referred to in political discussions as "the crime of '73." The dollar referred to was the *standard* silver dollar; at the same time the coinage of a *trade* dollar was authorized (intended to be used only in foreign trade), which, after 1876, was not legal tender in the United States.

These various changes in the purchasing power of the standard money had great effects upon industrial conditions. Particularly had they shifted the positions and claims of debtors and creditors, because of the enormous importance of money as "the standard of deferred payments." Let us now get a more definite understanding of that term.

As a medium of exchange, money comes to be the unit in which most prices are expressed and compared; in other words, it becomes the common denominator of prices.[7] This makes it also the most convenient unit in which to express the amount of credit transactions and of existing debts.[8] A credit transaction is a trade lengthened in time; one party fulfils his part of the contract, the other party promises to give an equivalent at a later date. The equivalent may be in any kind of goods; for example, in barter one may part with a horse on the promise of a cow to be received later; or a small horse on the promise of a large one; or a flock of sheep on the promise of its return at the end of the year with a part of the increase of the flock. A simple standard in which to express the debt is the thing borrowed, as horse, sheep, wheat, house. Again, the thing to which the value of debts is referred may be a thing quite different from the goods borrowed and, with the growth of the monetary economy and the use of the interest contract, money comes more and more to be used as the standard. At length the law declares that, in the absence of any other agreement, the amount of a debt is to be payable in terms of the unit of standard money, which thus is made legal tender as well as the customary standard of deferred payments. A *standard of deferred payments* is the thing of value in which, by the law or by contract, the amount of a debt is expressed and payable.

§ 7. **Increasing importance of the standard.** Until the use of money develops, the use of credit is difficult and limited; it

[7] See Vol. I, p. 262.

[8] See Vol. I, p. 263, on credit transactions, and p. 302, on the interest contract.

becomes easy when the value of all things is expressed in terms of a common circulating medium. It therefore generally is true that the importance of money as the standard of deferred payments increases with the use of money as a medium of trade. The volume of outstanding debts expressed in terms of money now very greatly exceeds the total value of the circulating medium. Changes in the general level of prices have, therefore, great effects upon all existing debts. The value of all debts changes in the same proportion as does that of the standard unit of money; when this rises or falls in value, it means increase or reduction, in the same ratio, of the purchasing power of every creditor. It is as if he had in his possession metal dollars equal in amount to the face of the debt, and they had changed by so much in purchasing power. The debtor's interests in such changes are, of course, just the reverse of the creditor's interests.

Outstanding contract debts may be roughly divided into two classes: short-time loans, running less than a year; and long-time loans, running for a year or more.[9] Fluctuations are rarely rapid and great enough to affect appreciably the debtors and creditors in the case of short-time loans. The results are appreciable in the case of loans running from one to five years, and may be very great in the case of loans made for still longer periods, such as the bonded indebtedness of nations, states, municipalities, and business corporations, and as mortgages given by farmers on their land or by owners of city real estate. A multitude of interests are thus affected by a change in the value of money. When money rises in purchasing power, receivers of fixed incomes are gainers. When it falls in purchasing power, they lose. Receivers of fixed incomes from loans include not merely private investors, but also many educational and charitable institutions which dispense their incomes for public purposes. Wages and salaries of many kinds go up and down less rapidly than do other prices, and thus to some extent wage-earners are in the position of passive

[9] See Vol. I, p. 304.

capitalists [10] as regards changes in the monetary standard. In a capitalistic age, therefore, almost every individual is affected in some way by a change in the value of money.

§ 8. **Fluctuating standard and the interest-rate.** In connection with the standard of deferred payments there is presented a problem of the effect that fluctuations of the standard may have upon the interest-rate.[11] As the general price-level falls or rises, the monetary standard conversely appreciates or depreciates.[12] If these changes are slight in amount and imperceptible in their direction they may not affect considerably the motives of borrowers and lenders. Therefore, the rate of interest this year in long-time loans would be just that resulting in the expectation, on all hands, of a stationary level of general prices. Suppose that rate to be 5 per cent on the standard investment (such as real-estate loans and good bonds). Then the lender of $1000 will receive each year a $50 income and at the end of the investment period $1000 principal, each dollar of which will purchase the same composite quantum of goods that a dollar would have purchased at the time the loan was made. Likewise, the borrower would pay interest and principal in a standard that reflected an unchanging general level of prices. But, now, if the general level of prices unexpectedly falls 1 per cent within the year, the creditor of a loan maturing at the end of the year would receive (principal and interest) $1050 which will purchase 1 per cent more goods per dollar than the sum he loaned, or (approximately) $1060 worth of goods. Hence, he has received, in quantum of goods, a yield of 6 per cent on his investment. If

[10] See Vol. I, p. 319.

[11] This could not be treated in connection with the interest-rate in Vol. I, Part IV, for the reason that even its elementary treatment must presuppose the fuller study of the nature of money and the study of changes in the level of prices, that has just been given in this and the three preceding chapters. The theory of interest in Vol. I, therefore, is a static theory in respect to the standard of deferred payments, and requires adjustment to apply to a condition of a changing price-level.

[12] See above, sec. 3.

this change continues for five years, the lender of a five-year loan would receive each year $50 having a purchasing power successively 1, 2, 3, 4, and 5 per cent greater than the same sum had at the making of the loan; and at the end of the five years would collect the principal, having a purchasing power 5 per cent greater. The lender, on his part, would have to pay interest and repay the principal in a money that is to be obtained only in exchange for a larger sum of goods than that which could be bought with each dollar that he borrowed. This means that, with individual exceptions, creditors generally gain and debtors lose by falling prices.

But this is fully true only in respect to loans already made. For just to the extent that such a movement of prices comes to be more or less regularly in the same direction, both borrowers and lenders are able to take it into account, and as experience shows, do take it into account.[13] When prices fall men become more eager to sell wealth, to lend the proceeds, and more reluctant to borrow for investment at the prevailing rate of interest and at the prevailing prices. There is an incentive to divest one's self of ownership (e.g., by selling stocks) and to become a lender (e.g., by buying bonds). This whole situation is reversed in a period of rising prices. The result is that the rate of interest in any long continued period of falling prices (such as from 1873 to 1896) has a trend downward and in a period of rising prices (such as from 1897 to 1915) has a trend upward. This movement of readjustment would not go on indefinitely, even if the same trend of prices continued; for in the strict theory of the case the adjustment would be complete when the interest rate had changed by just the amount of the annual change in the level of prices. For example, if 5 per cent is the static normal rate of interest, then when prices are falling 1 per cent each year, the adjusted rate of interest would be 4 per cent; and when prices were rising 1 per cent each year, the adjusted rate of interest would be 6 per

[13] Mention was made in Vol. I of the prospect of profit as affecting the motives of commercial borrowers; e. g., pp. 298, 335, 348, 495.

cent. Such adjustments serve to some extent to neutralize the effects of changes in the standard of deferred payments so far as concerns new loans made in view of just such a change and in expectation of its continuance. But no one can foresee exactly, and most persons take little account of, such a change until it has continued for several years in the same direction. The adjustment is therefore never very prompt or very exact. In some years the general level of prices has risen more than 5 per cent, or more than enough to offset the entire interest received by most lenders. A man with dollars to invest would have been as well off if he had kept them buried during that period.[14]

§ 9. **Notable changes in prices.** In most cases the true effects of monetary changes escape recognition. In a few cases, however, the change has been so great as to cause an economic revolution. Such was the change in prices following the discovery of America, which occurred soon after the old feudal dues had come to be generally expressed in terms of money instead of labor services. In modern times, since the mass of debts has become greater than ever before, such changes bring even graver economic consequence. The increase in the output of gold in 1849–57,[15] caused what was the most rapid, if not the greatest money inflation that had occurred since the sixteenth century. The substitution of gold for silver by some countries at that time, by making a great additional market for gold, helped to check the fall in its value. Indeed, a considerable decline in the output of gold after 1870 combined with its widening use to cause in 1873 the beginning of a great fall of gold prices. The resulting increase in the burden of outstanding debts was felt by all debtors, but particularly by

[14] The modern explanation of this phenomenon was worked out in the period of falling prices before 1896 and hence was referred to as the theory of "appreciation and interest" (meaning the relation of the appreciating dollar to a falling rate of interest). More generally the theory is that of the relation of a changing standard of deferred payments and the rate of interest.

[15] See ch. 4, sec. 12, and above secs. 1, 2, 4, 5.

great numbers of the agricultural classes both in Europe and in America. Their tribulations were aggravated by the fact that at that time (especially from about 1873 to 1896) the prices of their products were falling much more rapidly than were general prices, as a result of the very rapid extension of the agricultural land supply.[16] There was complaint, agitation, and demand for relief on the part of many interests in France, Germany, England, and the United States. As a result, the money question became in this country a leading political issue and continued to be such between 1873 and 1900.

§ 10. **Nature and object of bimetallism.** First came "the greenback movement," which lasted until after 1880.[17] This then gave way to an agitation for bimetallism. *Bimetallism* is the plan of using two metals as standard moneys. Bimetallism is legally authorized when both metals are admitted to the mints for free coinage at an established ratio of weight. Bimetallism may be legally authorized, but not actually working, for, if the market-value long continues to vary appreciably from the legal ratio, only one of the metals may in fact be left in circulation. This situation is called *limping* bimetallism (or the halting double standard), tho this is a contradiction of terms. National bimetallism is confined to a single country, as was the case in the United States before the Civil War, or in France before 1867. International bimetallism is that resulting from an agreement among several nations to use two metals on the same terms.

The theory of bimetallism is that the government can act on the value of the two metals through the principle of substitution. The metal tending to become dearer will not be coined, the other will be coined in greater quantities. The degree of influence that can thus be exerted on the value of the two metals depends on the size of the reservoir of the metal that is rising in value. When it all leaves circulation,

[16] See Vol. I, on agricultural leases, p. 159, wheat prices, p. 436, and changes in the land supply, p. 442.

[17] See ch. 5, sec. 11.

the law on the statute book permitting it to be coined becomes a mere phrase. In such a case there is bimetallism *de jure*, but monometallism *de facto*. The greater the league of states the greater is the likelihood that the plan will continue to work. The only notable historical instance of international bimetallism is that of the Latin Union, which united France, Belgium, Italy, and Switzerland in an agreement remaining actually in force from 1866 to 1874. A strong movement developed between 1878 and 1892 in favor of forming a great international bimetallic union of states.

One object of the movement was to put an end to the great fluctuations in the rates of exchange of money between the silver-using and gold-using countries, fluctuations which occasioned much uncertainty and loss to individuals engaged in foreign trade. The rise in the price of gold-exchange in the silver-using countries (notably India) meant also an increase in their burden of taxation. These countries collected their revenues in silver, but they had to pay their debts, principal and interest, in gold. Another object of this movement was to prevent the burden of individual debts from increasing by reason of the rise in the value of the single standard, gold. It was, indeed, hoped that by bringing silver much more into use, the value of gold would be reduced, thus bringing relief to the debtor classes. Still another object of the bimetallic movement was to aid the silver miners and silver-producing districts by creating a larger market for silver.

Several international conferences were held which were taken part in by some of the leading financiers of the world representing their respective governments. The United States was foremost in advocating the policy, France at first favored it, as did in large measure the British Indian administration, tho England was in the main opposed. The movement came to nothing.

§ 11. **The movement for national bimetallism in America.** When all hope of international bimetallism failed, the efforts of many of its advocates were turned to the plan of legalizing

national bimetallism in the United States at a ratio of 16 to 1. This was very different from the market ratio. Gold had become before 1860, in fact, the standard of our money system, and after 1873 it was the only metal admitted to free coinage. Silver, little by little, had been losing purchasing power in terms of gold, until from being worth, in 1873, one-sixteenth as much, ounce for ounce, it became, in 1896, worth but one-thirtieth as much as gold. The power of silver to purchase general commodities fell much less than the change in its ratio to gold would indicate, gold having risen in terms of most other goods as well as of silver. Nevertheless, the proposal to open the mints to the free coinage of silver at the ratio of 16 to 1 in the year 1896 threatened a sudden and marked cheapening of money.[18] Probably gold would have been entirely driven out as money and silver would have taken its place as the standard. In any event "free silver" would have accomplished the purpose of making the standard of deferred payments cheaper. It was at first a debtors' movement, but to succeed it had to enlist the support of other large classes of voters. And thus it developed into the more sweeping theory that wages, welfare, and prosperity were favored by a larger supply of money quite apart from the effect it would have upon debts.

In its extreme form the free-silver plan was a fiat scheme, for some of its supporters believed that by the mere passage of the law the two metals could be made to bear to each other any ratio desired. But its most intelligent advocates recognized that the force of the law was limited by economic conditions. The victory of the gold standard in the campaign of 1896 was, it would seem, due more to the well-founded fear that a sudden change of the money standard would cause a panic than to a popular understanding of the question.

[18] The advocacy of this proposal was called "the free-silver movement" because it involved resuming the free coinage of silver at the legal ratio of 16 to 1.

The free-silver advocates got what they desired, a reversal of the movement of general prices, through an occurrence for which no political party could claim the credit. In 1883 the gold production of the world was less than $100,000,000. From that date, with the opening of new gold-yielding territory in South Africa and in the Klondike, the annual output of gold had been increasing rapidly and almost steadily. The methods of extracting gold theretofore had still been in large part of a primitive sort. But intricate machinery was taking the place of crude tools, chemical processes had been introduced (notably, the cyanide process), and the principal product began to come from the regular and certain working of deep mines rather than from chance surface discoveries. In many parts of the world were enormous deposits of low-grade ores, before useless, that could be worked economically by the new methods.

The general price level fluctuated, but on the whole tended downward between 1884 and 1893 (the year of panic), and reached a minimum in the year 1895 in Germany, 1896 in England, and 1897 in America. It is noteworthy that the very year 1896, which marked the height of the political agitation to abandon the gold standard for silver, saw the gold production for the first time in all history surpass the two hundred million dollar mark. The gold output had caught up with, and began to surpass, the normal monetary demands of the world, meaning by that phrase, the amount of gold needed to maintain a stationary level of prices.

§ 12. **Rising prices after 1896.** The whole character of the monetary problem then changed. A period of rising prices set in, which has continued to the present time. By 1913 prices had risen just about 50 per cent above the low level of 1896. The rise has been, and still is, at the average rate of nearly 3 per cent each year. This caused a reversal of the former positions of advantage and disadvantage on the part of debtor and creditor respectively. The purchasing power of a 3 per cent annual interest on notes and bonds

has been offset by the decrease in the purchasing power of the principal of the debt. The burden of the average debt began relatively to decrease. A wide field for enterpriser's profits was opened up by the rapid displacement of prevailing prices in all quarters of the industrial world. The price of manufacturer's products rose in advance of the rise of costs of many raw materials and especially of the labor costs of manufacture. The average enterpriser's gain was the average wage-worker's loss. Wages (and salaries), as nearly always in the case of a change of price levels, moved more slowly than did the prices of most of the commodities which are bought with wages, thus causing great hardship to large classes living on comparatively slowly moving incomes.[19] Extremes meet, and these classes include both those living on passive investments, and those dependent on their daily labor for a livelihood.

Thus we escape the evils of a rising standard of deferred payments, only to meet those of a falling standard. And as long as we have so fluctuating a standard these difficulties must arise again and again, continually repeated, causing unmerited gains and losses to individuals. Let us conclude with a brief consideration of the fundamental principles involved in this problem.

§ 13. **Defectiveness of the gold standard.** Money is, in general, for both borrowers and lenders the most convenient standard of deferred payments. But from the usage of speaking of all things in terms of gold, arises the popular notion that the value of gold is always the same, while the value of other things changes. In truth, a fixed objective standard of value is not possible of attainment. Altho the value of gold is stable as compared with most things, it rests on the

[19] This happened to coincide with a relative increase of the price of food-products and of other necessities of daily life at a greater rate than general prices. This aspect of the much discussed rising cost of living must be carefully distinguished from that of the change of the *general* price level, and also from that of the relatively slower change of wages. See Vol. I, pp. 437, 445–446 on population and food supply.

estimates made by men and is constantly changing with conditions. The current new supplies of gold are comparatively regular. For centuries at a time there was little change in the methods of mining gold and there were no radical changes in its output. The nature of the use of gold, likewise, is such as to made changes in the amount of it needed, under ordinary conditions, more stable than is that of most other goods. Moreover, the stock of gold in monetary uses is but slowly worn out; it is, therefore, a large reservoir into which flows a comparatively small stream of annual production; the existing stock is twenty or thirty times the annual output. Yet the value of gold expressed in other things is never quite stable, and sometimes several influences combine to affect it greatly and suddenly. Recent inventions, chemical and mechanical, moreover, have considerably altered the conditions of production. While, therefore, it is the best standard yet devised and put into actual practice, it is very imperfect. A standard better than a single metal, more stable than a single commodity, is desirable if it can be found.

§ 14. **Various ideal standards suggested.** It may, perhaps, be agreed that the ideal standard of deferred payments is one that would insure justice between borrower and lender. Yet different views may be and have been taken as to what constitutes justice in this matter. The suggestion is attractive that repayment should involve the return of enjoyment equal to that which could be purchased with the sum at the time of the loan. Such a standard is impossible of perfect realization in any general way, for men's circumstances are constantly changing. To insure even to the average man the same amount of enjoyment is only roughly possible. The same goods do not afford the same enjoyment when conditions, either subjective or objective, have changed. Another suggestion is that the goods returned should represent the same sacrifice as those loaned. Here again the difficulty is in the lack of a standard applicable to all men. Whose sacrifice? That of the lender, who may be rich, or that of the borrower,

who may be poor? Some have supposed that the condition of equal sacrifices was met by the labor standard, according to which the sum returned should purchase the same number of days of labor as when borrowed. But what kind of labor is to be taken, that of the lender or that of the borrower or that of some one else? Labor is of many different qualities, which can be exactly compared only through their objective value in terms of some one good.[20]

It must be recognized that any possible concrete standard of deferred payments will sometimes work hardship in individual cases. The best average results for justice and social welfare will be secured by measuring debts in some standard that will change least often, and least rapidly, in relation to the great majority of people of all classes in the community.

§ 15. **The tabular standard.** Apart from the difficulties of its practical operation, a standard better than a single metal and more stable than a single commodity would be a *tabular standard,* consisting of a number of leading commodities in fixed proportions, such as is used in calculating index numbers expressing the general scale of prices. Such a standard averages the fluctuations of particular goods and would give a fair approximation in practice to the ideals of equal sacrifice and equal enjoyment (on the average tho not in individual cases). While some natural materials are growing more scarce and call for more sacrifice, other products are by industrial progress becoming more plentiful. This kind of standard has been viewed with favor by many monetary authorities, and despite the administrative difficulties ways may yet be found for putting it into practice.

After determining the tabular standard, the actual regulation of the quantity of money to make prices conform to the standard might be accomplished in one of several ways. It might be done by letting the value of the gold dollar fluctuate as it does now, while requiring a greater or less number of dollars to be given in fulfilment of all outstanding con-

[20] See on the labor theory of value, Vol. I, pp. 210, 228–229, 502.

tracts. For example, if prices by the tabular standard fell from 100 to 95 in the time between the origin of a debt of $100 and its payment, the debt would be discharged by paying $95; if prices rose to $110, the debt would be discharged only by the payment of $110.

By the plan of a "compensated gold dollar" the legal weight of the gold coins would be increased or decreased from time to time to conform with the tabular standard. Still a third method would be to regulate the issue of standard paper money, contracting and expanding its amount by issue and redemption, by deposit in and withdrawal from depository banks, at regular intervals to bring prices into conformity with the tabular standard. These are as yet but distant possibilities, and for some time to come gold will continue to serve as the standard money in the same manner as in the past.

PART III
BANKING AND INSURANCE

CHAPTER 7

THE FUNCTIONS OF BANKS

§ 1. Nature and classes of banks. § 2. Functions of banks. § 3. The essential banking function. § 4. Time deposits. § 5. Demand deposits. § 6. Discount and deposit. § 7. Nature of banking reserves. § 8. Bills of exchange, domestic. § 9. Issue of notes. § 10. Divergent views of typical bank notes. § 11. Banking credit as a medium of trade. § 12. Productive services of banks. § 13. Income of banks.

§ 1. **Nature and classes of banks.** Banks perform a variety of useful functions in every modern community. All these functions touch in some way upon the use of money, and banking problems always are related to money problems. It is our purpose now to understand the general nature and work of banks in relation to the general business activity of the community. A bank, as one first comes to know it, is a building (or a room in some building) in which there is a fire- and burglar-proof safe. In this room are men receiving and paying out money and acting as bookkeepers. Gradually one comes to understand that the bank is perhaps not the building but the business organization that is there performing these transactions.

In the United States there were in 1913 about 26,000 banks reported.[1] These may be classified first according to the

[1] These are classified as follows:

	Number	*—Per Cent—*	
National charter:			28.56
National banks	7,404	28.56	
State charter:			67.52
State banks	14,011	54.05	
Loan and trust companies	1,515	5.84	
Savings banks	1,978	7.63	
Private:			3.92
Private banks	1,016	3.92	
	25,924	100.00	100.00

source from which they derive their charters or authority to do a banking business as: national, state, and private. The last are unchartered and act under the general state laws governing private contracts; in general they are unsupervised.[2] Banks may be classified also according to the two main types of business they perform, as banks for savings and commercial banks. Most banks do mainly a general commercial business; some are distinctly banks for savings; but in truth this dividing line can be less and less sharply drawn between banks as wholes; rather the distinction must be made between the savings function and the commercial discount function, which are more and more being performed by one and the same bank. The trust company usually well exemplifies this union of functions. This will best be explained in connection with the subject to which we now turn, the analysis of the functions which banks perform.

§ 2. **Functions of banks.** Almost every bank performs various functions useful to its customers, but some of which are not essentially bound up with banking, and may be performed by institutions that are not truly banks. Among these are:

(a) Maintaining a safe deposit vault, where space may be rented by an individual to keep his valuable papers, jewels, etc. The customer does not usually deliver to the bank possession of the valuables, but himself retains the key to the box which the bank has no right to open. In larger cities this work is often done by separate institutions.

(b) Acting as money-changer to buy and sell moneys of different nations. This function is of less importance in America than elsewhere because of the great size of our country and of the small portion of our boundaries touching those of other nations using different monetary units. Moreover, the function is in large part performed for Americans by

[2] Opinion favors prohibiting the use of the word bank to any except regularly incorporated organizations, or at least subjecting private banks to the same supervision as the chartered banks.

ticket agencies at the ports of embarkation and by the steamship companies en route.

(c) Selling bonds and other investments to customers. In smaller communities the customers of a bank turn to it as the best source of information for safe investments of personal or trust funds. This opens to it a new possibility of service. Large investments, however, are usually made through the agency of more specialized investment brokers.

(d) Acting as trustee and business manager for passive investors, and especially as executor and administrator of estates or as guardian of a minor heir. This function has been taken up rapidly since about 1890 by the trust company [3] organized under state laws.

§ 3. **The essential banking function.** The one essential function of a bank, however, is selling (lending) its credit to its customers in some form which will conveniently serve the same function as money. A bank is sometimes defined as a business whose income is derived from lending its promises. The bank's credit is sold in the form of its promises, the evidences of which are its receipts, depositors' account books, drafts and checks on other banks, and bank notes. The indispensable condition to the exercise of this function by a bank is public confidence in its ability to fulfil its promise to pay whenever it is due. This confidence is built upon the bank's paid-up capital; its surplus and undivided profits; the further liability of the stockholders to make good any losses up to an amount equal to the capital stock each holds ("stockholder's double liability"); the financial prestige of the bank's officers, directors, and stockholders; the bank's established reputation and "good will" in the community after a period of successful operation; the character of its loans and of the securities which it owns; and, finally, by the reliance placed in the control and inspection by official ex-

[3] Not to be confused with a trust in the sense of a monopolistic enterprise, with which it has no connection except by mere verbal accident, through the word trust.

aminers. The bank may then sell its credit in any one or in all of the following five ways: (1) by receiving time deposits; (2) by receiving demand deposits; (3) by the method of discount and deposit; (4) by selling exchange of funds to distant points; (5) by issuing bank notes.

§ 4. **Time deposits.** Time deposits are funds to the credit of customers which, by agreement, are to be left for some specified minimum time or on condition that the bank may require notice in advance of the depositor's intention to withdraw them. The notice that may be required is usually thirty to ninety days; but only in times of general financial crises or of runs on particular banks is this requirement enforced. A sufficient deterrent to irregular withdrawal of funds is usually found in the loss of interest if deposits are withdrawn at other than stated times. The bank's right to require notice makes prudent the investment of a much larger proportion of its deposits and for a longer time; it reduces the proportion of deposits needed for reserves, and yet reduces the danger of a "run" upon the bank in time of financial distress. These are reasons why banks can and usually do pay interest on time deposits (at from 2 to 4 per cent), as until more recently they rarely did on demand deposits.[4] From the standpoint of the depositor a time deposit is, by its very nature, an investment and not a demand credit available for current monetary uses. Only that portion of a person's capital that for some more or less considerable period is not likely to be needed for other purposes ought to be put into time deposits. A bank, however, is generally a much safer place in which to keep a fund of purchasing power for the future than is the strongest private treasure box. Receiving time deposits is the one essential function of savings banks, but this function is increasingly performed by other banks.[5]

[4] See next sec.

[5] The Federal Reserve Act of 1913 has given encouragement to this practice by reducing to 5 per cent the reserve required to be kept against time deposits. See ch. 9, sec. 7.

Sometimes time deposits are cared for by a separate department and kept separate from the general business of a commercial bank.

§ 5. **Demand deposits.** Demand deposits are those payable on demand, the demand in practice being by means of personal checks requesting the bank to pay to (or on the order of) a specified person, or to pay to bearer. A customer's bank account consisting of demand deposits is called a checking account. Since the turn of the century it has become increasingly the practice to pay a low rate of interest (about 2 per cent) on current balances, oftener to large depositors. Banks attract demand deposits mainly by the convenience and economy which they offer to their customers in the guarding of funds from theft and fire and in saving the time, trouble, and expense of carrying money for making payments. A deposit in a bank is to the depositor for most purposes "just as good" as money in the pocket and for many purposes is even better. Thus the banks have become the custodians of a large proportion of the money (or funds) needed for current use by individuals and business corporations.

§ 6. **Discount and deposit.** The process of discount and deposit is the purchase of the promissory note of a customer,[6] the price being a credit in the form of a demand deposit on the books of the bank. This—the central and most characteristic banking operation—has something of mystery in it at first view. The simplest idea of making a deposit is that of bringing to a bank window bags and rolls of money or other funds (credit papers such as checks and drafts, calling for the payment of money). The bank in that case becomes the debtor and the depositor becomes the creditor of the bank. But in discount and deposit the depositor brings no money, and the credit paper that he gives is his own promise to pay whereby he becomes the bank's debtor. For example, when a bank discounts a thousand dollar note for three months and

[6] Usually with deduction of interest in advance; a process called discount. See Vol. I, pp. 275, 302.

credits its customer with the proceeds, its deposits are at that moment increased (let us say) $985. Notice that hereby the bank does not add a cent to the cash in its vaults while it has added to its liabilities payable on demand. As an offsetting asset it holds the note of its customer receivable at some future time.

§ 7. **Nature of banking reserves.** Banks would have nothing to gain by receiving deposits or by issuing notes if they were obliged to keep in the vaults actual money to the amount of their deposits and outstanding notes (unless they were paid by depositors for taking care of deposits). Banks have found it necessary in practice to keep on hand money amounting to only a fraction of all their outstanding obligations in order to be able to pay promptly all due demands, excepting in periods of general financial distress. The sum thus kept on hand is called the *reserve* or the *reserves* of the bank, and this is frequently expressed as a percentage of reserves against deposits or against note issues, respectively. Frequently, as in the United States, a minimum percentage of reserves is fixed by law.[7]

A bank's reserves consist, first, of the lawful money which it actually holds in its vaults at any moment and secondly, of certain other credit items in other banks or with the government, of such a nature that a bank is permitted to count them as tho immediately available.

The explanation of the adequacy of a mere fractional reserve is found in the nature of the individual monetary demand [8] and in the effective way in which a checking account serves as a substitute for actual money.[9] Every customer, if he would avoid overdrawing his account, must at most times

[7] The legal requirements as to minimum reserves vary greatly from no specific per cent to 40 or more in different countries, for different classes of banks, and for different purposes. Some examples of legal reserve requirements in the United States occur in the two following chapters.

[8] See above, ch. 4, sec. 5.

[9] See below, sec. 10.

keep a goodly balance to his credit that he does not immediately need. Many individuals and corporations must at times keep very large balances. The times of maximum monetary need of the customers of a bank never exactly coincide and many payments are made among the customers of a single bank, requiring only bookkeeping transfers. A fractional reserve is therefore ordinarily fully adequate, altho with any less than a 100 per cent reserve any bank would be insolvent if all of its demand obligations were presented at the same instant. Such a contingency is made impossible by business custom and public opinion especially among the larger customers of banks, but the panic of small depositors often brings about dangerous conditions.

§ 8. **Bills of exchange, domestic.** Foreign and domestic exchange is the sale of orders for the payment of specified sums of money at distant points. But for this, payments at distant points would ordinarily have to be made by sending the money in some way. It must often occur, for example, that hundreds of payments, aggregating millions of dollars, must be made by persons in and near Chicago to those in and near New York, while, at the same time, equally large sums are due from New York to Chicago. The wasteful process of shipping these sums back and forth is avoided by the cancellation of indebtedness between the two localities. It has been the practice for each small bank to keep a part of its legal reserves in correspondent banks in one or more of the larger cities on which it draws bills of exchange for its customers and to which in turn it remits for collection drafts and checks which it has received. From time to time, as balances of accounts increase on the one side or the other, shipments of actual money become necessary, but these are only a small fraction of the total amount of the bills of exchange. Similarly, the settlement of accounts between any two localities can be made by the shipment of comparatively small sums of money. Under the Federal Reserve Act the reserve banks

are in various ways assuming the functions of the correspondent banks.

The wider use and acceptance of individual checks at long distances from the banks upon which they are drawn limit by so much the proportion of special bills of exchange drawn by the banks themselves. Domestic exchange involves just the same principles as foreign exchange of funds, except that in the latter, usually, two different units of standard money are used. In connection with the discussion of foreign trade below, foreign exchanges will be explained and further light will be thrown upon the adjustment of the money supplies and levels of prices of the various sections of a single country as well as between different countries.

§ 9. **Issue of notes.** The issue of bank notes as a mode of lending a bank's credit calls for consideration here. Yet it must be observed at once that comparatively few banks in the world have now the legal right to issue their own notes. In some cases the right has been granted as a monopoly to certain banks in return for specified payments and services. But in general the function of bank note issue has come to be treated as so closely connected with that of the coinage and regulation of the standard money that it has been increasingly limited in each country to a central national bank, or group of banks, which is in many respects practically if not technically an organ of the government. This public nature of bank note issues has been strikingly evident in Russia, England, France, Germany, and other countries since the outbreak of the war in 1914.

No two countries have quite the same system and kind of bank notes. It is well to consider first, therefore, the qualities of typical bank money. This consists of notes issued by banks on the credit of their general assets, without special regulation by law. With such a form of note we have had until 1914 no experience in the United States since 1866, at which time a federal tax of 10 per cent on state bank notes made their issue unprofitable. Since the passage of the Fed-

eral Reserve Act we have temporarily two kinds of national-bank notes, the old bond-secured notes, in use since 1863 (very different from the typical form),[10] and the new kind of Federal reserve notes very nearly typical in character but issued only by the Federal reserve banks, not by individual banks.

A bank, by the issue of notes, puts into circulation as money its own promises to pay. The customer, in borrowing money or in withdrawing deposits or cashing checks and drafts from other banks, is paid with the bank's notes instead of with standard money. These notes may be returned to the issuing bank either to be redeemed in specie or to be paid in some other form of credit, such as deposits or exchange. The limit of the issue of such notes is the need of the community for that form of money, and if they are promptly redeemed in standard money on demand, they never can exceed that amount. A holder of a note (in the absence of special regulations) has the same claim on the bank that a depositor has. As it is to the interest of the bank to keep in circulation as many notes as possible, there is a temptation to abuse the power of note issue, to which many banks in America yielded in the period of so-called "wild-cat" banking before the Civil War.

§ 10. **Divergent views of typical bank notes.** Some persons seeing in bank notes but a form of ordinary commercial credit (like a promissory note or an individual's check) have contended that their issue should be entirely unlimited and unregulated except by the ordinary law of contract which makes the bank liable to redeem the notes on demand. Such bank notes would not be legal tender, and every one would be free to take or refuse them as he pleased. Each bank would thus put into circulation as many notes as it could, and as they would constantly be returned for redemption when not needed as money their volume would expand and contract with the needs of business.

It may be conceded that there is much truth in this view,

[10] Including, now, some Federal Reserve bank notes secured by United States bonds.

but not the whole truth. For, in reality, when bank notes are in common use, every one is compelled to take the money that is current. This offers a constant temptation to the reckless and unscrupulous promotion of banking enterprises, as has been repeatedly shown (notably in America in the days of "wild-cat" banking before 1860). The average citizen cannot know the credit of distant banks, and thus has not the same power of judging wisely in taking bank notes that he has even in making deposits in the bank of his own neighborhood. Between bank notes and ordinary promissory notes there are other differences. Bank notes pass without endorsement and thus depend on the credit of the bank alone, not, like checks, on the credit of the person from whom received. Unlike ordinary promissory notes, they yield no interest to the holder. They go into circulation and remain in circulation for considerable time by virtue of their monetary character in the hands of the holders. Thus they approach political money in their nature, and the banks are near to exercising the sovereign right of the issue of money.

At the other extreme of view have been those who consider bank notes to be essentially of the nature of political money. If they are so, it is argued, the power of issue should not be exercised by any but the sovereign state. In this view it is overlooked that bank notes, unlike inconvertible paper money, depend for their value on the credit of the bank, not on their legal-tender quality and on political power.[11] They must be redeemed on penalty of insolvency; government notes need not be, and yet will circulate at par if properly limited. Adequate provision for the prompt return and redemption of bank notes makes them "elastic" in their adaptation to monetary needs, which fluctuate with changes in commerce and industry from season to season and even from day to day.

The predominant opinion to-day is that in their economic nature bank notes share to some extent the character both

[11] In some cases, as during the bank restriction in England, 1797–1821, bank notes become inconvertible—practically political money.

of private promissory notes and of political paper money. They stand midway between the two. Everywhere it has come to be held that the issue of paper money of any kind is in its nature a public monopoly, and yet everywhere the bank note policy has come to be that of permitting the issue only to certain institutions, under strict public legislation and regulation, and of requiring in return for this privilege some substantial services or payments to the government.

§ 11. **Banking credit as a medium of trade.** The credit which, in five ways, banks sell (see above, section 3) serves, in most cases, the purposes of money to their customers. This is least true of time deposits, for the motive of the depositor in such cases is usually to *invest* his funds for a time rather than to keep them available as money. However, there are many cases in which persons save for some moderately distant use—such as the purchase of furniture, of a piano, of a house. The safety and convenience of time deposits, combined with the reward of a small rate of interest, cause great sums, in the aggregate, to be deposited as *temporary* savings, which otherwise would be hoarded in the form of money and thus withdrawn from circulation. In all such cases the time deposit is serving both as an investment and as a monetary fund for future use. This is a great economy in the use of money, for experience shows that in the savings banks of America the average reserves of actual money kept against deposits are only about 1½ per cent. In countries where banks are little known, the amount of actual money hoarded is therefore vastly greater than it is in the United States where there are $5,000,000,000 of individual deposits in *regular* savings banks, besides large sums in time deposits in commercial banks.

Demand deposits, while not money, clearly perform the function of a reserve of purchasing power for depositors and reduce by so much the amount of money each must keep at hand to meet his current needs of purchasing power. If the depositor's credit balance bears no interest, he has no motive

to keep a balance greater than he would require of actual money, and he has the motive to spend it or invest it in income-bearing capital whenever his balance (plus his cash in hand) exceeds his monetary needs.[12] Thus demand deposits are often spoken of (somewhat inaccurately) as "deposit currency," being funds at the command of depositors which are as disposable and as active and current for the monetary function as so much actual money would be. It is estimated that the rate of turnover of deposits in the United States is about 50 times a year. We may view the demand deposits subject to check as either a substitute for money or as a means by which the rapidity of circulation and the monetary efficiency of actual money held in bank reserves is multiplied many fold.[13]

The method of payment by bank drafts in domestic exchange reduces the need for, or increases the efficiency of, money in just the same way as does the use of checks. By the mutual

[12] Payment of interest on credit balances reduces the motive to withdraw for investment elsewhere any such excess, and mingles in the depositor's thought monetary and investment motives.

[13] In the United States in 1914 there were individual deposits reported in banks other than savings banks to the amount of about $13,400,000,000.

In national banks	$6,000,000,000
In state banks	3,250,000,000
In loan and trust companies	4,000,000,000
In private banks	150,000,000

Nearly all of these were doubtless demand deposits (what proportion were time deposits we have no data for determining), and were available as immediate purchasing power for the depositors. The total money (other than bank notes) in the commercial banks of the country was hardly 11 per cent of this amount. In that year the total amount of money of all kinds in circulation (and in banks) in the United States (outside of the Treasury), including gold and silver and certificates represented by bullion in the treasury, United States notes of all kinds, and national bank notes, was about one fourth of the amount of these individual deposits in commercial banks. This may suggest the enormous influence that banking has in determining the average efficiency of the circulating medium of the country.

credit of banks in different parts of the country, very large payments may be made in both directions with the movement of only the comparatively small amount of physical money needed to pay the balance after the cancellation of drafts, bills of exchange, and checks.

The use of bank notes reduces the amount needed of other kinds of money more directly, tho not more effectively, than do deposit accounts. Bank notes *are* money, and so long as their amount is limited by prompt redemption they circulate *instead of* so much of other kinds of money. Redemption is possible by the use of a reserve of standard (or of legal tender) money very much smaller than the amount of notes outstanding.

§ 12. **Productive services of banks.** There have always been some erroneous ideas regarding the magic power of banks to multiply the power of money. But there should be no more of mystery about banking credit than about the nature of money itself. Banks are the labor-saving machinery of finance. They gather loanable funds, reduce hoarding, make money move more rapidly, and create a central market between borrowers and lenders for the sale of credit. While not creating more physical wealth directly, they add to the efficiency of wealth; they simplify and quicken the movement of nearly all commercial transactions. Banks perform incidentally a further service in developing better business methods in the community. They enforce promptness and exactitude in business dealings. In supplying credit to enterprises, banks are constantly passing judgment on the collateral security presented to them and on the soundness of the enterprises that are seeking support. This gives to bankers great economic power, capable at times of misuse in political and social affairs, especially where a group of selfish men come to exercise a practical monopoly of business credit in any community.

§ 13. **Income of banks.** The income of banks is drawn from different sources, according to the size of the com-

munity and the nature of the banks. While in the villages and smaller cities the commercial banks perform a number of functions, in the larger cities they usually specialize in a far greater degree. The trust companies, however, with their greater versatility, are increasing in number. The income of banks is derived from discounts, interest on their own capital, charges for exchange and collection, dividends, interest and rents on investments, and profit from their bank notes. The capital with which a bank starts in business [14] could be loaned with less trouble and more cheaply without starting a bank, but used as a banking capital it can be loaned in part while still serving to attract deposits, which are the main source of the income of banks to-day. Charging smaller customers for exchange is a source of income to some banks, but in many cases this service is freely performed for regular customers and becomes a considerable expense. Banks make few investments in real estate or other physical property; it is, in fact, their duty to keep out of ordinary enterprises, but they are forced sometimes to take for unpaid debts things that have been held as security. Profits on bank notes have at times been the main, almost the sole, motive for starting banks; but that is not the case to-day when the right of issue is so strictly limited.

[14] See above, sec. 3.

CHAPTER 8

BANKING IN THE UNITED STATES BEFORE 1914

§ 1. The First and Second Banks of the United States. § 2. Banking from 1836 to 1863. § 3. National Banking Associations, 1863–1913. § 4. Defects of our banking organization before 1913. § 5. Lack of system. § 6. Inelasticity of credit. § 7. Periodical local congestion of funds. § 8. Unequal territorial distribution of banking facilities. § 9. Lack of provision for foreign financial operations. § 10. The "Aldrich plan."

§ 1. **The First and Second banks of the United States.** A knowledge of the history of banking is helpful to an understanding of the present banking system in our country. The form of our present banking system has been affected by various economic and political events which will be sketched here in broad outline to give a background for our present study.

Alexander Hamilton, the great first Secretary of the Treasury in Washington's cabinet, advocated the charter of a central national bank as one portion of his larger plan of national financiering. His purpose was realized in the chartering, in 1791, of the First Bank of the United States, for a period of twenty years. The capital for this institution was in small part subscribed by the government, but mostly by private capitalists. The management of the bank was left almost entirely in private hands. The central bank established branches in many parts of the country, issued bank notes which circulated everywhere without depreciation, acted as the governmental depository of funds and as governmental agency in various ways. It seems to have been successful

and useful as a banking institution until the expiration of its charter in 1811, but it was touched by the contemporary controversies over state rights and was from the first opposed by those who feared the growth of a strong central government. This opposition prevented the extension of its charter.

In 1816, however, after only a moderate discussion, the Second Bank of the United States was chartered for a period of twenty years. This also, in its purely banking aspects, seems to have been distinctly successful, conducting numerous branches in various parts of the country, maintaining at all times the parity of its notes, facilitating domestic exchange throughout the country, and enjoying unquestioned credit and solvency. However, this bank became, even in a greater degree than did the First Bank, the creature of political rivalries. In the period of rising democratic sentiment typified and led by Andrew Jackson, the bank came to be looked upon as the embodiment, or the stronghold, of plutocratic interests, and Congress permitted its charter to expire by limitation in 1836, near the close of Jackson's administration.

§ 2. **Banking from 1836 to 1863.** The Federal Government, which up to that time had deposited its funds in the central bank and its branches and in local state banks, established the "independent treasury," in 1840 (abolished in 1841 and re-established in 1846). By this plan the government kept its money of all kinds in various depositories (or sub-treasuries) in charge of public officials. While from 1792 to 1836 almost continuously a central banking system was in operation, other banks, organized under state charters, were steadily increasing in number. They received deposits, issued bank notes under state laws, and cared for local commercial needs. The abolition of the central national bank in 1836 left to the various state banks for twenty-seven years all the banking functions of the country. The banks of some states (notably those of New England and New York), under careful regulation and held to strict standards by public sentiment, for the most part maintained a high credit; but

many banks, under lax laws and regulations, were guilty of great abuses of credit and of downright dishonest practices. The evils were more especially evident in connection with excessive issues of bank notes.

§ 3. **National Banking Associations, 1863–1913.** The next step in federal legislation was taken in 1863 in the midst of the Civil War by chartering local "national banking associations." The purpose was in part to provide banks under national charters for banking purposes (both of deposit and of issue), and in part it was to make a wider market for United States bonds at a time when government credit was at low ebb. The plan adopted followed the experience of New York state (1829 on) with a system of bond-secured bank notes. Congress provided that every bank taking out a national charter must purchase bonds of the United States and deposit them with the treasurer of the United States, in return for which it would receive bank notes to the amount of 90 per cent of the denomination or of the market value of the bonds.[1] Bank notes issued on this plan, being secured by the bonds, rest ultimately on the credit of the government, not on the credit of the bank. They are not promptly sent back for redemption to the banks issuing them, as should be done if they were typical bank notes. They may circulate thousands of miles away from the bank that issued them, and for years after the bank has gone out of business. They are not an "elastic currency," increasing or diminishing with the needs of business. The changes in their amount depend upon the chance of the banks to make more or less in this way than by any other use of their capital, and this in turn depends largely on the price of bonds and on the rate of interest they bear. From 1864 to 1870, fortunes were made from this source, but thereafter banks could make little more from note issues than they could by investing the same amount in other ways. Many banks for a long period did not avail

[1] Whichever was the smaller. In 1900 this was changed so that notes could be issued to the full amount of the denomination of the bonds.

themselves in the least of their privilege of issue. The notes were subject to a tax.[2]

A national bank (as the law now stands) may be organized, with $25,000 capital in towns not exceeding three thousand population, with $50,000 in towns not exceeding six thousand, with $100,000 in cities not exceeding fifty thousand, and with $200,000 in large cities. Three cities, New York, Chicago, and St. Louis, have long been designated as central reserve cities, and some 47 other cities as reserve cities, in which the reserves of banks were required to bear a considerably larger proportion to their deposits than in other cities.[3] Other banks might count as part of their legal reserves their deposits in reserve city banks, up to a certain proportion. The national banks in the larger cities thus became the great capital reservoirs of cash for the whole country.

National banks have been subject to stricter inspection than have been the banks in most of the states, a fact which has strengthened public confidence in their stability. Except in this and the other respects above mentioned, a national charter offered few, if any, attractions to small banks, a majority of which have found it more advantageous to operate under state charters because of less stringent regulations as to amount of capital, reserves, and supervision.

§ 4. Defects of our banking organization before 1913. Taken altogether, the banks in the United States since 1863 have represented great banking power and very efficient service for the community in times of normal business. But in several respects it long ago became evident that our banks were operating less satisfactorily than those of several other countries. American banking organization had failed to keep

[2] In recent years this has been one half of 1 per cent when 2 per cent bonds, and 1 per cent when bonds bearing a higher interest, were deposited.

[3] In reserve cities 25 per cent and in other cities 15 per cent. The details of the regulations in the old law (given in part below, sec. 7) were all altered by the legislation of 1913.

pace with the increasing magnitude and difficulty of its task. Especially at the recurring periods of financial stress, such as occurred in 1893, 1903, and 1907, our banking machinery showed itself to be wofully unequal to the strain put upon it. Financial panics were more acute here than in any other land, and the evil clearly was traceable in large part to defects in the banking situation. In academic teaching and in public conferences of bankers, business men, publicists, and students, the subject was continually discussed after 1890. At length Congress in 1908 created a "National Monetary Commission" to inquire into and report what changes were necessary and desirable in the monetary system of the United States or in the laws relative to banking and currency. After the most extended inquiry and discussion that the subject had ever received, the commission submitted its report in January, 1912. The defects to be remedied, as enumerated in the report,[4] may be reduced to the following five headings: (a) Lack of system. (b) Inelasticity of credit. (c) Periodic local congestion of funds. (d) Unequal territorial distribution of banking facilities. (e) Lack of provision for foreign banking.

§ 5. **Lack of system.** Only in a loose sense could the banks of the United States be said (before 1914) to constitute a system at all. Both national and state laws dealt with individual banks only. It was not legal for a bank to establish branches in another city as is done in most countries. The several national banks in one city were legally quite separate. It was only by voluntary agreement that in some of the larger cities they came together into clearing-house associations. They made possible some measure of coöperation which, small as it was, proved at times of stress to be of much service within a limited sphere for the local communities. But even with the aid of these organizations the banks were unable in times of emergency to avoid the suspension of cash payments.

[4] The expressions within quotation marks in the following sections are taken from this report.

There was no provision whatever for the concentration of bank revenues so that each bank would be supported by the strength of the other banks, if a movement began to withdraw deposits in unusual amounts. Each bank then was compelled for self-protection to call for any sums it had deposited with other banks,[5] and to keep for its own use all the reserves it might have in excess of its own immediate needs. This threw a great strain upon the banks in the reserve cities, which in normal times had become the depositories of a good part of the reserves of the banks in other places. Thus developed a spirit of panic, like the fright of theater-goers crowding toward the door at the cry of fire.

The maintenance of the government's independent treasury contributed to the difficulties by causing the irregular withdrawal of money from circulation and thus depleting bank reserves in periods of excessive government revenues and by returning these funds into circulation only in periods of deficient revenues. Efforts to modify this system by a partial distribution of the public moneys among national banks had resulted, it was charged, in discrimination and favoritism in the treatment of different banks and of different sections of the country.

§ 6. **Inelasticity of credit.** Our banks, considered both separately and collectively, were unable to increase their loaning powers quickly and easily to respond to business needs. The need of greater elasticity of credit was felt in the more or less regular seasonal variations within the year, and in the more irregular variations in cycles of years from periods of prosperity to those of panic and depression in business. The inelasticity was necessitated by illogical federal and state laws restricting absolutely the further extension of credit when the reserves fell below the percentage of deposits (15 or 25 per cent) fixed by law. Reserves thus could not legally be used to meet demands for cash payments at the very time when most needed. This feature has been likened to the rule of the

[5] See further on this in sec. 7 on periodical congestion of funds.

liveryman who always refused to allow the last horse to leave his stable so that he would never be without a horse when a customer called for one. The refusal of credit by the banks at such times when they still had large amounts of cash in their vaults increased the need and eagerness of the public to draw from the bank all the cash they could, and often precipitated the insolvency of the banks. Clearly some means were needed to enable the loaning power of the individual banks to be increased at such times, so that no customer with good commercial paper need fear to be refused a loan, even tho the rate of interest might have to be somewhat higher for a few days or weeks than the normal rate.

Our bond-secured bank notes lacked almost entirely the quality of elasticity needed to meet these changing business needs.[6] Their value being dependent primarily upon the amount and price of United States bonds, they might be most numerous just when least needed as a part of our circulating medium.

§ 7. **Periodical local congestion of funds.** In times of general confidence each bank finds it profitable, and is tempted, to extend its credit to the extreme limit permitted by the law governing the proportion of reserves to deposits. Of the 15 per cent reserves required in most banks, three-fifths (9 per cent) might be kept in banks in reserve cities, and of the 25 per cent in reserve city banks, 12½ per cent might be kept in central reserve cities, where it counted as part of the depositing banks' legal reserves, was a fund upon which domestic exchanges could be drawn, and usually earned a small rate of interest (usually 2 per cent). Very large reserves were kept in New York city where they could be loaned "on call," and the largest use for call loans was in stock-exchange speculation. Thus every period of prosperity encouraged an unhealthy distribution of reserves, gave an unhealthy stimulus to rising prices, and "promoted dangerous speculation."

[6] See above, sec. 3.

§ 8. **Unequal territorial distribution of banking facilities.** Another aspect of this concentration of surplus money and available funds in the larger cities was the comparatively ample provision of banking facilities in the cities and in the manufacturing sections, and imperfect provision in the agricultural districts. The whole financial system seemed designed to induce the poorer country districts to lend funds at low rates of interest to be used speculatively in cities, instead of enabling the richer districts, the cities, to lend to the rural districts for productive enterprise. The rates of bank discount in different sections of our country have long been most unequal—lowest in the largest cities, and highest in the rural South and West—whereas in all parts of Canada, with a different system of banking, the rates have long been much more approximately uniform.

Indeed, our national banking development has been predominantly urban and commercial to the neglect of rural and agricultural interests. National banks were (until 1913) forbidden to make loans on real estate, and this greatly "restricted their power to serve farmers and other borrowers in rural communities." There was "no effective agency to meet the ordinary or unusual demands for credit or currency necessary for moving crops or for other legitimate purposes." The lack of uniform standards of regulation, examination, and publication of reports in the different sections prevented the free extension of credit where most needed. Finally, the methods and agencies for making domestic exchange of funds were, compared with other countries, imperfect and uneconomical even in normal times and could not "prevent disastrous disruption of all such exchanges in times of serious trouble."

§ 9. **Lack of provision for foreign financial operations.** Not without its influence on public opinion was the consideration that we had "no American banking institutions in foreign countries." Many bankers and business men felt, as did the commission, that the time had come when the organization of

such banks was "necessary for the development of our foreign trade." Foreign banks in South America and the Orient, handling American trade, were believed to favor their own countrymen rather than the interests of American merchants. In contrast with the European nations with their centralized control of banking, we had "no instrumentality that" could "deal effectively with the broad questions which, from an international standpoint, affect the credit and status of the United States as one of the great financial powers of the world. In times of threatened trouble or of actual panic these questions, which involve the course of foreign exchange and the international movements of gold, are even more important to us from a national than from an international standpoint."

§ 10. **The "Aldrich plan."** The National Monetary Commission submitted with its report a plan which was known by the name of the commission's chairman, Senator Aldrich. This plan was embodied in a bill for a National Reserve Association, a bank for banks, which bore some likeness to the great central banks of Europe. In the many details of the plan an effort has been made to remedy every one of the difficulties above described and to supply all the needs indicated. The plan was favored pretty generally by bankers, but called forth many adverse opinions. In the year of a presidential election, however, Congress took no action in the matter. All parties were pledged to some kind of banking reform, but particular proposals were not discussed in the campaign.

CHAPTER 9

THE FEDERAL RESERVE ACT

§ 1. General banking organization. § 2. The Federal Reserve Board. § 3. Federal reserve banks. § 4. Federal reserve notes. § 5. Reserves against Federal reserve notes. § 6. Reserves against Federal reserve bank deposits. § 7. Reserves in member banks. § 8. Rediscount by Federal reserve banks. § 9. Changes in national banks. § 10. Operation of the Act.

§ 1. **General banking organization.** President Wilson and the newly elected Congress with its Democratic majority made banking reform one of the main objects on the program for the special session beginning March 5, 1913. The result was the Glass-Owen bill, which became law as the Federal Reserve Act December 23 of that year. The bill was actively discussed within and without the halls of Congress, and many of its features were attacked by bankers individually and acting through the bankers' associations, at various stages of its progress. As a result it underwent numerous amendments in details, and tho it remained in most essentials as it was first proposed, it was at last accepted even by its critics as on the whole a beneficent act of legislation. Indeed, its strongest critics had been the friends of the Aldrich plan, and the Federal Reserve Act embodies, in a greater degree than its authors were ready to admit, the main features of the Aldrich plan. In one important respect, however, it is different; it provides for more decentralization of control and of reserves than did the Aldrich plan. It created not one central banking reserve, but, in the end, twelve regional, or district, banks each to keep the reserves of its district. The Jacksonian tradition of opposition to a central bank[1] in part helps to explain this;

[1] See ch. 8, sec. 1.

in part the contemporary congressional investigation and discussion of the so-called "money-trust" and the consequent desire to decrease the importance of "Wall Street" and of New York city banking power.

On the accompanying map are given the outlines of the districts as constituted and altered down to 1916.[2]

§ 2. **The Federal Reserve Board.** At the head of the banking system stands the Federal Reserve Board of seven members, five of them appointed by the President and Senate of the United States for this purpose, and two serving *ex-officio* —the Secretary of the Treasury and the Comptroller of the Currency. One of the five shall be designated by the President as Governor and one as Vice-Governor of the Board, but the Secretary of the Treasury is *ex-officio* chairman. The

[2] The law provided that an organization committee should designate not less than eight nor more than twelve cities as Federal reserve cities and should divide the continental United States, excluding Alaska, into districts each containing one such city. Twelve districts were designated. Wherever, therefore, the act speaks of "not less than eight nor more than twelve," or of "as many as there are Federal reserve districts," we may, for convenience, speak of twelve.

term of the appointive members is ten years and the salary is $12,000 a year.

The powers of the board are numerous and important. The board is made the head of a real *system* of banking, the twelve parts of which can, in times of emergency, and at the board's discretion, be compelled to combine their reserves by means of lending to each other (rediscounting), to the very limit of their resources, at rates fixed by the board. By this means the reserves of the several district banks may be "piped together" and thus be practically made into one central bank under governmental control, altho centralization was in outward form avoided by the bill. Alongside of the Reserve Board is placed a Federal Advisory Council, consisting of one member from the board of directors of each of the twelve district banks. This council has only the power to confer with, make representations and recommendations to, and call for information from, the Federal Reserve Board.

§ 3. **Federal reserve banks.** The twelve Federal reserve banks which opened for business November 16, 1914, are of a type of institution new in our financial history. They are "banks for banks" belonging to the system in their respective districts. Every national bank must, and any state bank or trust company may,[3] subscribe for stock to the amount of 6 per cent of its capital and surplus, and thus become a "member bank." The capital of each Federal reserve bank was to be at least $4,000,000; in fact only two of those organized (Atlanta and Minneapolis) had at their opening less than $5,000,000 capital; the largest (New York) had $21,000,000, and the average was $9,000,000. The member banks are to receive dividends of 6 per cent, cumulative, on this stock, and net earnings above that amount are to be paid to the Government as a franchise tax.[4]

[3] On agreeing to comply with reserve and capital requirements of national banks and to submit to Federal examination.

[4] Except that until the surplus of any reserve bank amounts to 40 per cent of its paid-in capital stock, one half of its net earnings shall be paid into a surplus fund.

Each reserve bank has nine directors, consisting of three classes of three men each. Classes A and B are elected by the member banks by a system of group and preferential voting designed to prevent the large banks from outvoting the smaller ones. Directors of class A are chosen by the banks to represent them, and are expected to be bankers; those of class B, tho chosen by the banks and tho they may be stockholders, shall not be officers of any bank, and shall at the time of their election be actively engaged within the district in commerce, agriculture, or some other industrial pursuit. Directors in class C are appointed by the Federal Reserve Board, one of them being designated as chairman of the board of directors and as Federal reserve agent. They represent the public particularly, and may not be stockholders of any bank.

Any Federal reserve bank may:

a. Receive deposits from member banks and from the United States.

b. Discount upon the indorsement of any of its member banks negotiable papers, with maturity not more than ninety days, that have arisen out of actual business transactions, but not drawn for the purpose of trading in stock and other investment securities.

c. Purchase in the open market anywhere various kinds of negotiable paper.

d. Deal anywhere in gold coin and bullion.

e. Buy and sell anywhere bills, notes, revenue bonds, and warrants of the states and subdivisions in the continental United States.

f. Fix the rate of discount it shall charge on each class of paper (subject to review by the Federal Reserve Board).

g. Establish accounts with other Federal reserve banks and with banks in foreign countries or establish foreign branches.

h. Apply to the Federal Reserve Board for Federal reserve notes to be issued in the manner below indicated.

§ 4. **Federal reserve notes.** In 1914 there were outstanding about $750,000,000 of what we may now call the old-style

bank notes (bond-secured). These were by the new act not forcibly retired at once; but, as the law is shaped, they probably will be retired at the rate of about $25,000,000 a year, and will all disappear from circulation in thirty years.[5]

Whenever the banks having old-style bank notes outstanding desire to retire any of their circulating notes, the Federal reserve banks are required[6] to purchase the bonds in due quota (not to exceed $25,000,000 in any one year). On the deposit of these bonds with the Treasurer of the United States, the Federal reserve banks may receive other circulating notes (essentially of the old style) called Federal reserve bank notes, or may receive 3 per cent bonds not bearing the circulating privilege.

The new kind of notes provided by the act are called Federal reserve notes. They are not secured by the deposit of government bonds, but they are secured beyond all question in other ways. First, they are obligations of the United States receivable for all taxes, customs, and other public dues, and are redeemable in gold on demand at the Treasury of the United States. Secondly they are receivable by all member banks in the twelve districts and by all Federal reserve banks, and redeemable by the latter in gold or lawful money (which includes greenbacks and gold and silver certificates). Thirdly, their credit and prompt redemption is insured by certain elastic rules as to reserves in gold which must be kept for the redemption of outstanding notes. Fourthly, they are secured by collateral, consisting of notes and bills accepted for rediscount from member banks, which must be deposited by a

[5] These notes are all secured by the deposit of bonds of the United States, a large share of them bearing interest at the very low rate of 2 per cent. Two per cent is less than the market rate for government loans, for 3 per cent bonds without this privilege sell above par. Therefore these 2 per cent bonds were held almost exclusively by banks, and would have lost a good share of their value had the note-deposit privilege been withdrawn.

[6] Through the Federal Reserve Board or they may do it voluntarily, sec. 4.

Federal reserve bank with the Federal reserve agent of its district, dollar for dollar for every note it receives. Fifthly, the notes become "a first and paramount lien on all the assets of the bank." This is what gives the notes their character of asset currency. It is evident that the notes unite in a manner without example the characteristic of asset bank notes with the characteristics of political paper money.[7]

No notes, it will be observed, are issued by or on request of the member banks, but only on request of a Federal reserve bank. After the notes have been issued, the bank may reduce its liability any day by depositing lawful money with the Federal reserve agent who is right there in the bank. The Federal reserve banks and the United States Treasury must promptly return to the banks through which they were issued all notes as fast as they are received, and "no Federal reserve bank shall pay out notes issued through another on penalty of a tax of ten per centum." The regulations do not apply to the member banks, but their effect must be to keep notes from circulating long in any district except that for which they were issued.

§ 5. **Reserves against Federal reserve notes.** The rule applying in normal times to reserves against note issues is that each bank must provide a reserve in gold equal to 40 per cent "against the Federal reserve notes in actual circulation, and not offset by gold or lawful money deposited with the Federal reserve agent." At least 5 per cent is to be on deposit in the Treasury of the United States. The proportion of reserves to the liability for note issues by any bank, however, may be allowed to fall below 40 per cent, on condition that the Federal Reserve Board shall establish a graduated tax of not more

[7] The Act does not explicitly say by whom the notes are issued: it says that they are "to be issued at the discretion of the Federal Reserve Board"; that "the said notes shall be obligations of the United States." Further on the notes are spoken of as "issued to" a Federal reserve bank, and again as "issued through" a Federal reserve bank, but not *by* it. But the phrase occurs (sec. 16) "its [i. e., the Federal

than 1 per cent per annum (it evidently might be made less if the board chose) upon such deficiency, until the reserves fall to 32½ per cent and thereafter a graduated tax of not less than 1½ per cent on each additional 2½ per cent deficiency or fraction thereof.[8]

This tax must be paid by the reserve bank, but it must add an amount equal to the tax to the rates of interest and discount charged to member banks. The effect of these rules is to give a power of note issue in time of emergency without compelling the reserve banks to lock up their reserves held against notes. Suppose for example that the circulating notes were in normal times $1,000,000,000 and the reserves, therefore, were $400,000,000 and the rate of discount 5 per cent. Then the circulation might be doubled with the same reserves, the proportion thus falling to 20 per cent of outstanding notes, and the rate of discount to customers rising to 13.5 per cent

reserve bank's] Federal reserve notes." The notes thus are technically issued by the United States, but not as ordinary political (fiat) money, for they are not given a forced circulation by the Government in paying its indebtedness. But the banks "shall pay such rate of interest on" the amounts of notes outstanding as may be established by the Federal Reserve Board (i. e., to the Government of the United States). Practically the notes (as respects choice of time of issue, amounts, profits from them, commercial assets to secure them and to redeem them) are asset currency issued by the several Federal reserve banks.

[8] This may be shown in the following table:

When reserves against notes are—	the tax rate upon the total deficiency shall be—
Below 40.0 to 32.5 per cent	1.0 per cent
" 32.5 to 30.0 " "	2.5 " "
" 30.0 to 27.5 " "	4.0 " "
" 27.5 to 25.0 " "	5.5 " "
" 25.0 to 22.5 " "	7.0 " "
" 22.5 to 20.0 " "	8.5 " "
" 20.0 to 17.5 " "	10.0 " "
" 17.5 to 15.0 " "	11.5 " "
" 15.0 to 12.5 " "	13.0 " "
" 12.5 to 10.0 " "	14.5 " "
" 10.0 to 7.5 " "	16.0 " "
" 7.5 to 5.0 " "	17.5 " "
" 5.0 to 2.5 " "	19.0 " "
" 2.5 to 0.0 " "	20.5 " "

(5 plus 8.5). Or, to take a most extreme supposition, suppose that the withdrawal of gold had been so great as to reduce the reserves against notes to $50,000,000; yet outstanding notes might be doubled (becoming $2,000,000,000, the proportion falling to 2.5 per cent, the rate of discount rising to 24 (5 plus 19).

§ 6. **Reserves against Federal reserve bank deposits.** Every Federal reserve bank shall, under normal conditions, maintain reserves in lawful money of not less than 35 per cent against its deposits. But the Federal Reserve Board may suspend any reserve requirement in the Act for a period not exceeding 30 days and from time to time renew the suspension for periods not exceeding 15 days; but in that case it must establish a graduated tax upon the amounts by which the reserve requirements may be permitted to fall below the levels specified as to note issues. Altho the amount of the tax on the deficiency of reserves against deposits is not indicated in the act (as it is in respect to excess note issues) it is plainly the thought that the Board, to which discretion is left, will follow somewhat the same rule in both cases. The great discretionary power as to reserve requirements thus lodged in the hands of the Board makes possible at times of emergency the use of the reserves both of the reserve banks and of the member banks, down to the last dollar, if need be, without violation of law. This gives practically unlimited opportunity to expand credit both by the issue of bank notes and by discount and deposit in periods of financial crises.

§ 7. **Reserves in member banks.** A fundamental change is made in the rules as to the reserves against deposits that must be maintained by the member banks. A new distinction is made between time and demand deposits. Time deposits are defined as those payable after thirty days or subject to not less than thirty days' notice; and demand deposits as those payable within thirty days. In every case the reserve requirement against time deposits is only 5 per cent. This gives encouragement to banks to maintain savings departments.

The requirements as to reserves against demand deposits are not uniform, being the lowest for banks in smaller cities (the great majority), larger for banks in the reserve cities, and largest for banks in the three central reserve cities (New York, Chicago, St. Louis). The act substitutes the new Federal reserve banks for the banks in reserve and central reserve cities as the depositories of funds that may [9] be counted as a part of the reserves of member banks. The new rule requires that one-third must be in the bank's own possession, a fraction slightly over a third must be in the Federal reserve bank, and the remainder may be kept in either place. This may be tabulated as follows:

	Not in reserve cities	*In reserve cities*	*In central reserve cities*
Total reserves, per cent	12	15	18
Must be in its own vaults	4/12	5/15	6/18
May be either place	3/12	4/15	5/18
Must be in a Federal reserve bank	5/12	6/15	7/18

These requirements as to total reserves are, as compared with requirements of national banks under the old law, a reduction respectively of 20 per cent, 40 per cent, and 28 per cent. The total decrease in the amount of reserves required for all three classes of national banks was about $400,000,000 on the amount of deposits held in September, 1914.

§ 8. **Rediscounts by Federal reserve banks.** More important than any other single feature of the act is, however, that by which each Federal reserve bank is to rediscount notes, drafts, and bills of exchange arising out of actual commercial transactions, when indorsed and presented by any of its member banks. This, quite apart from the note issues, gives a power to the banks collectively, under the general supervision and control of the board, to expand credits indefinitely at any time for real business purposes. Any business man able to offer any commercial paper of sound quality should now be

[9] The complete application of the new rule is deferred for a period of three years from the passage of the act.

able to borrow on it at some rate of discount, even in the most stringent times. And, in turn, every member bank will now be able at such times to rediscount such paper and thus secure credit toward its reserve requirement on the books of its Federal reserve bank. Suppose, for example, that a member bank (in a central reserve city) saw its reserve in the Federal bank fall below 7 per cent of its deposits. It could by rediscounting $7000 worth of notes increase by $38,888 the amount to which it might legally extend credit to its customers (i.e., $7000 is 18 per cent of that sum). The deposits of the Federal reserve bank would then be increased $7000, against which it must have a reserve of 35 per cent, or $2450. If the reserves of any Federal reserve bank fall too low, it can in turn rediscount its paper with the other Federal reserve banks.[10] If the time comes when no one of the twelve banks can longer maintain a 35 per cent reserve, the board may reduce or suspend the requirement, levying a tax graduated according to the deficiency. The provision here for elasticity of credit combined with union and solidarity of all the central banking reserves of the country to meet unusual demands in emergencies, exceeds any needs which can be expected to arise.

§ 9. **Changes in national banks.** There is here created a national system of reserves, but it will be observed that membership in the new system of the Federal reserve banks is not limited to national banks, but is open on equal terms to banks organized under state laws. While in most respects the general banking law remains as it was, certain changes are of importance. The percentage of reserves henceforth required of all member banks (as above indicated) is a substantial reduction of the former requirement for national banks. In some other respects the powers of national banks are enlarged. One with a capital and surplus of $1,000,000 may with the approval of the Board establish foreign branches, and one

[10] See on "piping" provision, sec. 2, above.

not situated in a central reserve city may loan on farm lands for a term not longer than five years, but not to exceed one third of its time deposits or 25 per cent of its capital and surplus. National banks may now be granted permission by the board to act as trustee, executor, administrator, or registrar of stocks and bonds, thus having the rights that have proved in many cases to be of advantage to trust companies organized under state laws.

§ 10. **Operation of the Act.** It was fortunate that this act was nearly ready to be put into operation when, August 1, 1914, the great European war broke out. The able appointees to the Federal Reserve Board commanded the confidence of the bankers and of the public. The knowledge that the reserve banks would early begin operations was reassuring during the grave financial stress of the next three months, and the opening of the district banks in November, 1914, at once made possible the release for commercial uses of cash reserves and credits to meet the needs of reviving business.[11] Only an extended experience can show how this enormous new banking organization will operate as a whole and in its details.

Because of the very wide discretionary powers given to the board in the administration of the act much depends on the character and ability of the members of the board as well as on a sound public opinion that will keep this great power from use in partisan and selfish ways. No doubt amendments of the act will appear necessary, but there can be no question that the Federal Reserve Act has inaugurated a new epoch in the banking and financial history of our country.[12]

[11] See sec. 7 above.

[12] Several other features of the law well merit description. Among these features are measures for developing bankers' acceptances, open market operations, the gold clearing system of the Federal Reserve Board, and the clearing of checks and parring of exchange.

CHAPTER 10

CRISES AND INDUSTRIAL DEPRESSIONS

§ 1. Mischance, special and general, in business. § 2. Definitions. § 3. A feature of a money economy. § 4. European crises. § 5. American crises. § 6. A business cycle. § 7. General features of a crisis. § 8. "Glut" theories of crises. § 9. Monetary theories of crises. § 10. Capitalization theory of crises. § 11. The use of credit. § 12. Interest rates in a crisis. § 13. Dynamic conditions and price readjustments. § 14. Tariff changes and business uncertainty. § 15. Rhythmic changes in weather and in crops. § 16. Remedies for crises.

§ 1. **Mischance, special and general, in business.** Every separate business enterprise is subject to chances which suddenly decrease its profits and the prosperity of its owners; such are fire, flood, illness of its owners, unfavorable changes in prices of materials or of the products.[1] The interests of many other persons in the neighborhood may be so bound up with an enterprise that its losses may mean unemployment, lower wages to workingmen, and bankruptcy to local merchants and to banks. Sometimes misfortune and disaster affect whole communities. The lack of cotton while the Civil War was in progress compelled the factories of Manchester to close in 1864, and the earthquake and fire in San Francisco in 1906 left a quarter of a million people homeless.

But a change of business conditions is constantly occurring that is of wider extent, that is of less accidental and of more rhythmic nature, and that appears to be the effect of slowly working and more general causes. The enterprise of a mod-

[1] On the way these affect private profits see Vol. I, pp. 340, 341 (and references there given in note), 348 ff. and 361 ff. There are thus good reasons for discussing crises in connection with profits, as well as with money and banking.

ern community, as a whole, "general business," moves along, in a wavelike manner, going through a somewhat regular series of changes that is called a business cycle. We are now to study the nature of these cycles.

§ 2. **Definitions.** Crisis means, generally, a decisive moment or turning point. The word crisis suggests a brief period, a moment, something that is sudden, severe, and soon over. In medical usage it is the period when the disease must take a turn for better or for worse. As used in economics, the term, however, implies a sudden change of business conditions for the worse, a collapse of prosperity. What precedes has not the appearance of disease, but rather that of exuberant health. Crises in economics may be distinguished as industrial, speculative, and financial, according as one or another influence seems to be more potent, but all are essentially financial. The change that occurs always is connected in some way with the use of money and credit.

A financial *crisis* is the culmination of a period of rising prices, and a sudden fall which shatters the credit of some banks, brokers, merchants, and manufacturers. Every crisis is marked by much confusion and loss and by hasty efforts of individuals and institutions to meet their pressing obligations. Sometimes this process of liquidation goes on quietly and in other cases it becomes a wild scramble, each one trying to save himself, in which case it is a financial *panic*. An *industrial depression* is the period of hard times that usually follows a financial crisis.

§ 3. **A feature of a money economy.** Financial crises, by their very nature, are confined to communities in which the money economy prevails and where there is a developed state of industry. The periods of industrial hardship in the Middle Ages were connected usually not with the collapse of prices, but with political oppression, famine, wars, pestilence, and scourges of nature. Throughout the lands money was little used and there was no development of credit and of credit prices. The money economy began, as has been noted,

in the cities. As the use of money spread, as larger commercial enterprises were undertaken, as borrowing and the payment of interest became common, there began to appear in city trading circles, on a small scale, the phenomena of the modern crisis.[2]

§ 4. **European crises.** In Europe financial crises date from 1763 and have occurred at more or less regular intervals since. The common statement that the cycle of a crisis is run in a period of ten years, finds only partial support in history. The chief crises of the eighteenth century occurred in 1763, 1783, 1793, these dates marking the close of wars of some magnitude. The crises were not widespread or general, but were more marked in England, which was at that time farther developed industrially and in its money economy than other countries. Likewise, in the nineteenth century, the crises were of unequal force in various countries, usually being severer in England. They may be dated 1803, 1825, 1838, 1847, 1857, 1864–66, 1875, 1890, 1900, 1907, and 1914. These were attributed to various causes; that of 1825 to over-trading abroad; that of 1847 to railroad-building; while that of 1866 followed the severe disturbance of trade in 1864 caused by the interruption of the cotton trade and commerce by the Civil War in America. While in many parts of England the crisis of 1864 was unusually severe, in other countries it was of little moment. Germany, after several years of great speculative prosperity, had a most severe crisis in 1875; while France, although prostrated by the war of 1870–71, losing a large amount of wealth, and paying a thousand millions of dollars to Germany as a war indemnity, escaped a commercial crisis almost entirely at that time.

§ 5. **American crises.** Since the beginning of the nineteenth century, the financial connections of the United States with London, the leading loan market of Europe, have been such that every crisis in either England or America has extended its effects to the other country. But the disturbances

[2] See Vol. I, pp. 51, 154, 300–302.

are so modified by the particular conditions (of crops, politics, and speculation) that the phenomena never correspond exactly in time of occurrence, in duration, or in intensity. The first notable crisis in America occurred about 1817 in the very violent readjustment of trade after the resumption of commerce with Europe in 1816.[3] In 1837–39 came in quick succession two crises, not quite distinct from each other, the second similar to the relapse of a fever patient. The conditions were rapid westward expansion, over-speculation in lands, reckless state internal improvements, great issues of state bank notes, and the financial measures of Andrew Jackson, which included the dissolution of the Second Bank of the United States in 1836.[4] The crisis of 1857 followed a period of great prosperity marked by rising gold production and prices and a great increase in foreign trade. The crisis of 1873, possibly the severest in our history, followed great speculation, especially in the direction of railroad building on an unexampled scale after the war. The blow, when it fell, was intensified by the relative contraction of currency then in progress, leading to the return to a specie basis and lower prices.[5] The crisis of 1884, a comparatively slight one, occasioned (rather than caused) by the discussion of the money question, was followed by some years of noticeable depression. The years 1889 to 1892 witnessed prosperity, only slightly interrupted in 1890, that culminated in a crisis in May, 1893 (likewise generally explained as due to the unsettled state of our monetary system), followed by a period of great depression lasting until 1897. A rapid growth of business was checked but little in 1900 when a crisis occurred in Europe, especially severe in Germany. In November, 1902, began in America what has been called "the rich man's panic" of 1903 in which for a year many securities were sold by holders because European creditors were recalling their loans.

[3] See below, ch. 15, sec. 5, on the tariff legislation at this time.

[4] See ch. 8, sec. 1.

[5] See ch 6, sec 5.

American business, however, slackened but little, altho building operations were somewhat checked. General prices, which had been moving upward since 1897, remained almost unchanged in 1903 and 1904, and then continued going upward until 1907. In the period from September to November of that year occurred a severe crisis both in Europe and in America. The industrial depression following this was marked in 1908, slowly growing less. The crisis at the outbreak of the war in August, 1914, was quite exceptional, being due to the sudden demand of Europe upon New York for funds. Within a couple of months it was over and soon prices were again rising as the result of large exports of merchandise followed by gold imports.

§ 6. **A business cycle.** Let us now sketch in broad outline a business cycle, bearing in mind that this series of changes does not repeat itself with unvarying regularity, but that it is fairly typical in the modern business world. The period leading up to a crisis is one of relative prosperity; then occurs a crisis in which prices fall, at first rapidly, and afterward for a while going slowly lower. When prices are at the lowest point many factories are closed, and much labor is unemployed. Let us start at that point. Conditions are worse in some industries than in others. General economy and great caution prevail; few new enterprises are undertaken. For those persons having available funds this is a good time to buy, and property begins to change hands. Then hoarded money begins to come out of its hiding places. Money and credit flow in from other countries, particularly if business conditions are better abroad than here, for when prices are lower than they have been, relative to those of other countries, a country is a good place in which to buy. At the same time that the money in circulation thus increases, there is a general return of confidence that increases credit. Not only are there more dollars, but each does more work. Then old enterprises are resumed and new ones are undertaken. The purchase of materials in larger quantities causes a rapid rise in the prices

of many raw materials and of all kinds of industrial equipment. The less efficient laborers and others that have been out of work, begin to find employment, and then, more tardily, wages begin to rise. As a result, the costs of many products begin to rise rapidly. The only classes not sharing in this improvement are the receivers of fixed incomes. As prices rise, the purchasing power of their incomes correspondingly falls.

At length prices begin to go up less rapidly, and the question arises in many minds whether the movement can continue, and if not, when it will cease. Men wish to hold on for the last profits, and are willing to risk something to gain them. When prices rise not only as compared with former domestic prices, but as compared with current foreign prices, foreign imports are stimulated and exports fall. This calls for a new equilibrium of money and requires at length large and continued exportation of specie. This checks prices, and, reducing the specie reserves of the banks, compels them to be more cautious. At the same time the increase of costs in many industries begins to reduce profits. The fall in the value of many stocks and securities held by the banks forces many brokers and speculators to convert their resources into ready money. This is the moment of danger; weak enterprises find their foundations crumbling, and there are many failures.[6] The falling prices, the shattered credit, and the financial losses force many factories to close, and many workmen are thrown out of employment. This moment of widespread loss is the crisis. It is followed by another period of low prices and of small output, and therefore of profits small or negative in many industries. Business must again enter upon a period of retrenchment, for it has completed another cycle.

§ 7. **General features of a crisis.** Altho irregular in time of occurrence and unlike in their immediate occasions, financial crises show certain general features. They are a part of

[6] See diagram of business failures 1890–1914, in Vol. I, p. 364.

the larger movement here outlined as the business cycle. Some have thought this cycle to be normally a period of ten years, divided into one year of crisis, three years of depression, three years of recovery, and three years of unusual prosperity. This succession of events occurs pretty regularly, though not in the regular intervals of time. Crises are more severe in countries with more extensive use of money and credit, but still more severe where the credit system is more loosely administered and less efficiently coördinated. They are harder in the United States and England than in Germany, harder in Germany than in France, harder in western Europe than in eastern Europe, harder in Christendom than in heathendom. They are less severe in rural districts, where prosperity depends more on crop conditions, and business has in it less of financial speculation. Their effects are least felt in the staple industries, for when hard times come people economize on the less essential things. The glove-factory, the silk-factory, the golf-club-factory are more likely to close than the flour-mill. In a crisis wages and salaries are less affected than are profits, but wageworkers suffer in the loss of employment. Those money lenders who have eliminated chance as far as possible and have taken a low rate of interest lose little; the risk-takers who draw their incomes from dividends on stock or from bonds of a less stable kind, often lose much.

§ 8. **"Glut" theories of crises.** Many explanations of the causes of financial crises have been offered.[7] Nearly all of these belong to the general group of "glut" theories, of which genus there are two species, under-consumption and over-production theories. These are, in truth, but two aspects of the same idea.[8] The one view is that too many goods are produced, the other that too few are consumed. The overpro-

[7] In the first annual report of the United States Commissioner of Labor is given a long catalog of theories that have been suggested, many of them quite fantastic.

[8] See Vol. I, ch. 38, on Abstinence and Production. Believers in the glut theory usually condemn efforts to encourage frugality among the masses, calling it the "fallacy of saving."

duction theorist seeing that in a crisis warehouses are filled with goods that cannot be disposed of for what they cost (or at best, not so as to give a profit), and that factories are shut down and men are out of employment for lack of demand, declares that productive power has grown too great. The under-consumption theorist, seeing the same facts, says that the trouble is lack of purchasing power. He observes that there are some people who would like to buy more of some of these things, but that such people lack income with which to buy. Usually he asserts that this is because production grows faster than wages, wages being fixed, as he believes, by the minimum of subsistence—a theory akin to the iron law of wages. In both over-production and under-consumption theories, the inequality of demand and supply is looked upon as a general one. There is supposed to be not merely an unequal and mistaken distribution of production, but a general excess of productive power.

The wide vogue held by these views would justify a fuller discussion and disproof of them here, did space permit. It must suffice to indicate merely that they have the same taint of illogicalness as the "fallacy of waste," and the "fallacy of luxury."[9] They overlook the fact that an income, either of money or of other goods, coming even to the wealthiest, will be used in some way. It may be used either for immediate consumption or for further indirect use in durable form. Through miscalculation there may be, at a given moment, too many consumption goods of a particular kind, but the durable applications can find no limit until the inconceivable day when the material world is no longer capable of improvement. At the time of a crisis, there is unquestionably a bad apportionment of productive agents, and a still worse adjustment of their valuations, but these facts should not be taken as proving that there is an excess of all kinds of economic goods.

§ 9. **Monetary theories of crises.** Another group of theories explains the crises as being due to money, either too much

[9] See Vol. I, ch. 37, secs, 6 and 9.

or too little. The unregulated issue of bank notes has been assigned as the cause of crises, especially under the circumstances accompanying such crises as those of 1837 and 1857 in America, when bank note issues greatly contributed to the unsound expansion of credit. The issue of government paper money years before, leading to inflation and speculation, was by many believed to be the cause of the crisis of 1873. The reverse view is taken by the advocates of a cheap and plentiful money. They say that these crises were caused, not by the expansion, but by the contraction of the money stock; for example, not by the inflation of prices through the issue of greenbacks in 1862 to 1865, but by the contraction of the currency from 1866 to 1873.

There is only a fragment of truth in these various views. It is always lack of "money" at the moment of the crisis that causes any particular failure, and in that sense it is always lack of "money" that causes a crisis. The question is, whether in any reasonable sense it can be said that it was lack of a circulating medium before the crisis that brought it on. There is no support for this view, except in the rare case when the money standard is undergoing a rapid change, as in the United States from 1866 to 1873, and the statement then needs much modification and explanation. The monetary theories of crises are a bit nearer to the truth than are those of the over-production type, for the crisis is always connected with prices and credit. But it is clear that these rhythmic price changes occurring in the business cycle are not due to the same causes as are the general movements of the price level, due to an increasing or decreasing output of gold or again to a paper money inflation. Statistics show that while a general price level is slowly changing like a tidal movement, the effect of the rhythmic business cycle appears now in hastening, now in retarding, the changes in the price level.

§ 10. **Capitalization theory of crises.** Here we verge upon a different type of explanation of the financial crisis—one of a psychological nature. The quantity of money, we have seen,

affects prices more or less according as credit is more or less used in connection with it. Money plus confidence has a larger power of sustaining prices, than money without, or with less, confidence. And throughout the business cycle the amount of confidence, expressed in such ways as the readiness to grant credits and in the easy extension of the time of collection, is constantly changing. Over-confidence at one time is suddenly followed by widespread lack of confidence. This has led some to say that lack of confidence is the cause of crises. This is a truism, but it does not explain what is the real cause of this lack of confidence, which, when the crisis comes, is not mere unreasoning fear that needs only to ignore the danger to banish it. Might it not just as truly, if not more truly, be said that the cause is *over-confidence* in the period preceding the crisis?

The essential characteristic of a crisis is the forcible and sudden movement of readjustment in the mistaken capitalization of productive agents. Capitalization runs through all industry. The value of everything that lasts for more than a moment is built in part upon incomes that are not actual, but expectative, whose amount, therefore, is a matter of guesswork, or "speculation."[10] Many unknown factors enter into the estimate of future incomes. The universal tendency to rhythm in motion (material or psychic) manifests itself in an overestimate or underestimate of incomes and of every other factor in value. This is emphasized by a psychological factor called sometimes the "hypnotism of the crowd," and sometimes, the "mob mind." Most men follow a leader in investment as in other things. The spirit of speculation grows till often it becomes almost a frenzy, and people rush toward this or that investment, throwing capitalization in some industries far out of equilibrium with that in others.

The cause of crises immediately back of the maladjusted capitalization thus is seen to be a psychological factor; it is the rhythmic miscalculation of incomes and of capital value, oc-

[10] See e.g., Vol. I, pp. 271, 335, 365–367.

curring to some degree throughout industry, but particularly in certain lines. This subjective cause in men is given an opportunity for action only when certain favoring objective conditions are present.

§ 11. **The use of credit.** Most noteworthy of these objective conditions is the general use of credit. The credit system greatly enhances the rhythm of price. If the value of a thing that is fully paid for falls, the owner alone loses; but if the value of a thing only partly paid for falls so much that the owner is forced to default in his payment, the loss may be transmitted along the line of credit to every one in a long series of transactions. A credit system, highly developed, is a house of cards at a time of financial stress. Demand liabilities are at such a time the greatest danger, so that the banks, ordinarily the pillars of financial strength, become at such a time the points of greatest weakness in the financial situation. If many of the customers were not restrained by their sense of personal obligation to the banks, by the strong pressure which the banks can bring to bear upon them, or by the force of public opinion among business men, from withdrawing the balances to their credit in a time of crisis, all commercial banks would become insolvent at once in a crisis by the very nature of their business; for all their ordinary deposits are nominally payable on demand.

§ 12. **Interest rates in a crisis.** In normal times there is always outstanding a great mass of short-time, commercial loans.[11] The motive of the borrower, in most cases has been to hire more labor and to buy more materials for use in his business. Ordinarily these loans can and are renewed without difficulty or are replaced by others, based on the security of new business transactions in unbroken succession. Now at the time of a crisis a general contraction of credit occurs, and all borrowers with maturing obligations are faced with bankruptcy. The effort of the business man at such a time is not to make a positive profit, but to save what he can from the

[11] See Vol. I, p. 304.

threatened wreck. The demand for short-time loans, therefore, in such times of stress, fluctuates rapidly, and exceedingly high interest rates prevail in these loan markets for a few days or a few weeks, rates which have only a remote relationship with the usual capitalization of most agents.

The distress of the business man is magnified by the fact that it is just at such times that both the equipment he has bought and the products he has made become temporarily almost unsaleable at prices as high as he paid for them when he bought them with the borrowed money. He may know that prices will soon be higher, but he cannot wait. Various courses are open to him in this emergency; he may borrow the money at a very high rate of interest, holding the goods for better prices; or he may sell the goods under the unfavorable conditions; or he may sell other capital such as stocks and bonds. The end sought is the same—to get ready money; and the methods are not essentially unlike—the exchange of greater future values for smaller present values. The sacrifice sale thus reveals the merchant's high estimate of present goods in the form of money. The purchaser of some kinds of property in times of depression is securing them at a lower capitalization than they will later have. The rise in value may be foreseen as well by seller as by buyer, but the low capitalization reflects the high interest rate temporarily obtaining. A. T. Stewart, once the most famous New York merchant, is said to have laid the foundation of his fortune when, being out of debt himself, he bought up the bankrupt stocks of his competitors in a great financial panic. The high interest at such times is but the reflection of the high premium on present purchasing power.

The worst of the evils of crises are confined to the markets where the greatest numbers of short-time loans are made. Most of the long-time loans do not fall due in such seasons of stress, and the great mass of slowly exchanging wealth alters little and slowly in price. Such loans as fall due can generally be renewed for long periods at rates little higher

than usual, the market for long-time and short-time loans being in large measure independent of each other. But they are not quite independent, and some lenders take whatever sums they can collect on maturing long-time obligations and loan them on short terms at high rates of interest, or buy goods, whole enterprises, bonds, and stocks, at the unusually low prices temporarily prevailing. The effect of this is to raise somewhat the interest rate on long-time paper to accord with the new conditions.

§ 13. **Dynamic conditions and price readjustments.** Another condition favorable to the rhythmic movement of capitalization is a dynamic economic society. The past century has opened up new fields for investment on an unexampled scale. Investment has advanced both intensively and extensively in a series of great waves. New machinery and processes have given undreamt of opportunities for enterprise in the older countries, and the physical frontier of investment has moved outward with the march of millions of immigrants to people the fertile wilderness. Such factors disturb the equilibrium of prices both in time and space, give a powerful impulse toward higher values in the older lands, and stimulate the hopes of all investors. When the balance between the capitalizations of various industries and between the incomes of the various periods proves to be false, the inevitable readjustment causes suffering and loss to many, but particularly in the inflated industries. But, because of the mutual relations of men in business, few even of those who have kept freest from speculation can quite escape the evils.

Among the dynamic conditions in industry are changes in the general price level whether due to changes in the production of the standard money commodity (relative to population) or to changing methods of doing business. If the price level is falling (i.e., the standard unit is appreciating), the burden of the great mass of outstanding debts is growing heavier upon the debtors.[12] Sooner or later some of them break down un-

[12] See above, ch. 6, on the standard of deferred payments.

der its weight. At such times many attempt to shift their capital from active investments such as stocks, to passive investments such as bonds. When the price level is rising, the opposite conditions prevail. But such adjustments proceed uncertainly and unevenly in different industries, with much speculation in shifting from one type of business to another, and with much accompanying miscalculation.

§ 14. **Tariff changes and business uncertainty.** Another variable influence in American business has been the tariff. Every tariff revision, whether the rates go upward or downward, shifts somewhat the relative opportunities and profitableness of different industries. Some of these call for far-reaching readjustments of investments and of productive forces. Some persons gain and some lose by every such change. It is observed that a reduction of tariff rates seems to have a more disturbing effect upon business than does an increase. This probably is because the industries favored by protective tariffs in America are those most fully within the circle affected by crises; whereas most of the consumers adversely affected by a rise of tariff rates are outside the commercial circles where short-time credit is common and where the rapid readjustment of investment leads to a financial crisis. It never has been convincingly shown, however, that there is any large measure of correspondence in time (not to say causal relation) between tariff revisions and crises.[13]

§ 15. **Rhythmic changes in weather and in crops.** A psychological movement, once started, accumulates force and momentum up to a certain point where a reaction begins. This rhythmic movement as it appears in the capitalization of enterprises is favored and magnified, we have seen, by the wide use of credit and by the constantly changing technical and physical conditions of industry. These call for constant revaluations of the sources of incomes, thus destroying customary and habitual valuations. But why should the cycle begin or end at one point of time rather than at another;

[13] See note on tariff legislation and business crises, end of ch. 15.

and what determines the length of the cycle? Some of the new dynamic forces such as inventions and growth of population are distributed pretty regularly along the line, so that their influences are nearly equalized. But occasionally some large impulse may serve to start a swing and if this impulse is somewhat regularly repeated, it may serve to keep up the rhythmic motion. True, the lack of coincidence in the impact of various influences which occur accidentally, such as political changes, wars, and the rapid opening of new routes of transportation, would serve to hasten or to retard, perhaps for a time quite to alter, what would otherwise be the rhythm of the cycle. That there is nevertheless, a noticeable degree of regularity in the recurrence of crises may be due to the presence of one dominating factor.

Alternation of good and poor harvests has always seemed to be favorable to business prosperity. In America since about 1865, farm products have constituted the larger part of our exports, so that a succession of large harvests has usually acted to stimulate exports (one of the features of a period of prosperity), to give us a larger credit balance in international trade, and to reduce the rate of exchange.. Large harvests of the staple agricultural crops in America have been known to be closely related to the amount of rainfall in the three most important growing months. Recently, it has been shown that the rainfall of the Ohio Valley occurs in cycles of about eight years, and in a larger cycle of thirty-three years. The cycle of yield per acre of the nine principal crops is shown to correspond closely with the cycle of pig iron production (one of the best single indices of growing business) dated one to two years later.[14] As the cycles of rainfall and of harvests are not coincident in different countries, it will require further study to adjust to these observations the fact of the

[14] In both cases there is what is called in statistics a high degree of correlation (viz., .719 and .800), indicating that there is that percentage of probability that there is some causal relation between the two sets of figures.

world-wide extent of the great financial crises. But a better understanding of objective conditions of this kind will give fuller meaning to the psychological interpretation of crises.

§ 16. **Remedies for crises.** The financial crisis must be looked upon as an economic disease which brings many evils in its train. The need is not merely to mitigate the severity of the brief period of crisis, but also to smooth out the curve of the business cycle so as to reduce periodic unemployment, the lottery element in profits, and the number of unmerited failures in business. Several measures may aid toward this end. In the past the crisis has been more severe in America than in Europe because of certain well-recognized defects which now have been largely remedied in the Federal Reserve Act.[15] The provisions whereby any one may get credit on good commercial assets should make it impossible for a crisis to degenerate into a panic. This legislation has provided springs to reduce the jolt of the change from a higher to a lower level of prices.

Probably other improvements may be made in our banking laws. Competent students of the subject have urged that the payment of interest on deposits not subject to notice before withdrawal should be made unlawful, because demand deposits constitute the greatest danger at critical times. In principle this objection is sound, tho experience may show that this evil has been practically remedied by other features of the Federal Reserve Act. Moreover, bankers could, by pursuing a more conservative policy, discourage speculative methods of enterprise. The strong public disapproval of stock-market speculation on margins may some day be able to express itself effectively in ways that will not injure healthy business. Greater stability in our tariff policy would remove a constantly disturbing factor in prices, as would likewise the stabilizing of the standard of deferred payments. In the attempt to remedy the great evil of unemployment, public works of every kind might be planned and distributed in time

[15] See above, ch. 9, secs. 5, 6, 8.

so as to better equalize the demand for labor and materials. Finally, much better commercial statistics are needed, and for collecting them and reporting the outlook, government organization is required comparable in range and methods to the weather bureau.

It cannot be expected, however, that financial crises, in the sense of general readjustments of prices downward from time to time, ever can be completely abolished. There will always be changes in general industrial conditions calling for re-evaluation of the existing sources of income; and in this process there will always be a tendency to rhythmic swing like that of a river, which carries the stream of prices now on this side of the valley, now on that. But this fluctuation of general prices surely can be so greatly moderated in magnitude and in evil results as to make the word "crisis" almost a misnomer. It is toward the attainment of this irreducible minimum of uncertainty and disaster in business that efforts should be directed.

CHAPTER 11

INSTITUTIONS FOR SAVING AND INVESTMENT

§ 1. The nature of saving. § 2. Economic limit of saving. § 3. Commercial bank deposits of an investment nature. § 4. Investment banking. § 5. Savings banks in the United States. § 6. Typical mutual savings banks. § 7. Postal savings plan. § 8. Advantages of the postal savings plan. § 9. Collection of savings and education in thrift. § 10. Building and loan associations. § 11. The main features. § 12. The continuous plan. § 13. The distribution of earnings. § 14. Possible developments of savings institutions.

§ 1. **The nature of saving.** The motives actuating the different classes of lenders may, for our present purpose, be reduced to two: to postpone the consumption of income, and to obtain a net income from wealth (or investment). Saving always is relative to a particular period and is for more or less distant ends. The child saves its pennies to go to the circus next week, the working girl saves her dimes for a new hat next spring, the earnest high school pupil saves to go to college next year, and the provident man saves for his family's future needs and for his own old age. But always, to constitute saving, there must be for the time a net result: the excess of income over consumptive outgo in that period. This is easily distinguishable from various forms of pseudo-saving of which many persons that are really spending all their incomes are very proud. Such forms are: planning to buy a particular thing and then deciding not to do so, but buying something else; finding the price less than was expected, and thereupon using this so-called saving for another purpose; spending less than some one else for a particular purpose, such as food, but off-setting this by larger outlay for another

purpose, such as clothing; spending all one's own income but less than some one else with a larger income. We may define saving as the conversion, into expenditure for consumptive use, of less than one's net income within a given income period.

Saving goes on in a natural economy both by accumulation of indirect agents and by elaboration so as to improve their quality.[1] It goes on to-day by the replacement of perishable by durative agents, as in replacing a wooden house by one of stone or concrete, and by producing wealth without consuming it, as in increasing the number of cattle on one's farm. But saving has come to be increasingly made in the form of money (or of monetary funds), and in this chapter we shall consider some of the ways in which this can now be done.

§ 2. **Economic limit of saving.** There is an economic limit to saving, as judged from the standpoint of each individual.[2] The ultimate purpose of every act of saving is the provision of future incomes, either as total sums to be used later or as new (net) incomes to be received at successive periods. The economic limit of saving in each case is dependent upon the person's present needs in relation to present income and conditions, as compared with the prospect of his future needs in relation to his future income and conditions. Each free economic subject must form a judgment and make his choice as best he can and in the light of experience. There is no absolute and infallible standard of judgment that can be applied by outsiders to each case. Yet there is occasion to deplore the improvidence that is fostered and that prevails, especially among those receiving their incomes in the form of wage or salary. Considered with reference to the possible maximum of welfare of the individuals themselves, the ap-

[1] See Vol. I, chs. 9 and 10.

[2] See Vol. I, pp. 285–290 for the analysis of saving from the individual standpoint; and pp. 482–499 for its relation to general economic conditions.

portionment of their incomes in time is frequently woful. It is uneconomic for families of small income to save through buying less food than is needed to keep them in health; but it is likewise uneconomic to spend the income, when work is plentiful and wages good, for expensive foods having little nutriment and then, for lack of savings, to go badly underfed when work is slack and wages are small. There is for each class of circumstances a golden mean of saving. The saving habit may develop to irrational excess and become miserliness, but this happens rarely compared with the many cases where men in the period of their largest earnings spend up to the limit on a gay life and make no provision for any of the mischances of life—business reverses, loss of employment, accidents, temporary sickness, permanent invalidity, or unprovided old age. Despite the development of late of new agencies and opportunities for saving there is need of doing more toward popular education in thrift.[3]

§ 3. **Commercial bank deposits of an investment nature.** If a commercial bank pays no interest on demand deposits there is no motive for the depositor to keep a balance larger than he needs as current purchasing power. When his bank account increases beyond that point, it becomes available for a more or less lasting investment to yield financial income. If the sum is small or if the owner is at all uncertain as to his plans or if he is not in a position to find another attractive form of investment, the offer by the bank of a small rate of interest on special time deposits (2 to 3 per cent is not an unusual rate in such cases) will suffice to cause him to leave such funds in the bank. Since about 1900 the practice has been greatly extended of paying interest even on "current balances" of regular checking accounts (demand deposits). If the new 5 per cent rule[4] as to reserves against time deposits operates to cause commercial banks generally to pay a rate ranging from 2½ to 3½ per cent on time deposits, their

[3] See Vol. I, p. 484.

[4] See above, ch. 9, sec. 7.

amount will doubtless increase greatly. But still, in the future as in the past, those depositors having funds that can be invested for considerable periods will seek a higher rate of interest than can be obtained from commercial banks.

In their loaning function the "commercial" banks (as the adjective indicates) serve mainly the special needs of the *commercial* elements of the community—business men borrowing for short terms to carry out particular transactions. Loans made on short-time commercial paper (quick assets) are very suitable to the needs of a bank that has its liabilities largely in the form of demand deposits. Time deposits can be more safely loaned on the security of real estate and for longer periods.

Despite their limitations in this respect, the commercial banks must be recognized as of growing importance in the work of encouraging and collecting small savings, which in many cases are better invested in other ways. In 1916, the centenary of the beginning of savings banks in this country, a nation-wide propaganda was undertaken by the American Bankers' Association for the encouragement of savings.

§ 4. **Investment banking.** Enormous amounts of securities issued by governments or by corporations (railroad or industrial) are now on the market and to be bought conveniently by private investors. Through special bond houses some bonds are to be had in denominations as small as $100 and $500. The regular brokers on the stock exchanges buy and sell, for a small commission, the regular bonds and investment stocks. Several large statistical and financial expert agencies [5] in return for an annual subscription, offer advice to investors regarding general market conditions and special securities.

For a large number of investors the personal examination and selection of sound securities is too difficult a task. To serve their needs many bonds and trust companies have of

[5] E.g., Babson Statistical Organization, Brookmire Economic Service, Moody Manual Co., Moody Corporation Service.

late developed special departments for investment banking. Through these agencies the banks are constantly placing as relatively permanent investments securities which they have bought or have aided "to float" or which they handle only as commission agents. In any case the real investment banker is bringing to his task special training and a high sense of his professional obligations, and is employing the services of statisticians, financial experts, and of practical engineers to determine exactly the fundamental conditions of each investment. Investment banking promises to increase steadily in amount and importance.

§ 5. **Savings banks in the United States.** For the increasing number of wage-earners, salaried employees, and persons following professions, investment as active capitalists is impossible.[6] Their savings must take the form of passive investments. But there are few good opportunities for lending money in small amounts, without great risk, and the requirement of skill, time, and labor to look after the loans and to collect the interest is prohibitive to a small lender. To provide a place where small sums could be kept with safety and so as to yield a moderate rate of income, the first modern savings bank in the United States was instituted in New York in 1816 after a plan already developed in England.

In form these banks are mutual, having no capital stock on which dividends are to be paid. The boards of trustees are self-perpetuating and receive only fees for attending meetings. In their legal aspect these banks have a philanthropic character. Their investments are limited by law to specified, conservative classes of securities and loans on real estate. The total increase from investments is, after paying the expenses of operation and setting aside a surplus, distributable to the depositors at regular periods. In the United States the number of such institutions reported in 1914 was 2100.[7]

[6] See Vol. I, p. 318.

[7] Report of the Comptroller of the Currency. Not all of these are mutual. Statistics, moreover, include in some cases (e.g., California)

They have over 11,000,000 depositors, deposits to the amount of $5,000,000,000, an average deposit of $444 per depositor, or of $50 per capita of the whole population. These figures are very unequally distributed geographically, the divisions ranking as to total deposits in the following order: the Eastern Middle, New England, Middle Western, Pacific, Southern, and Western divisions. The first two of these groups of states have about 75 per cent of all the deposits, the Southern states hardly 2 per cent, and the Western (North Dakota to Oklahoma) only ¼ of 1 per cent.

§ 6. **Typical mutual savings banks.** About one third of these banks are on the mutual plan, having no capital stock (most of them in the East) and these contain about four fifths of all the deposits. The stock savings banks have individual deposits of over a billion dollars, and have outstanding capital stock to the amount of about $90,000,000 (about 9 per cent of their deposits). These stock savings banks to a much greater extent than do the mutual banks transact also a commercial business.

The banks on the mutual plan are therefore the most important, the typical savings banks. The average rate of interest they paid to depositors in 1914 was 3.86 per cent. About one half of their resources are invested in loans, mostly to small borrowers on the security of real estate, and most of the remainder consists of bonds and other securities of the safer kinds.

Savings banks are subject to the supervision and inspection of the banking departments in the several states, a fact that exerts a salutary effect though not insuring absolutely against

the savings deposits of commercial banks but not the number of such banks, and in other cases (Michigan) some banks that do chiefly a commercial business. The line of demarcation between savings banks and savings departments of commercial banks cannot be sharply drawn. The Comptroller of the Currency reported in 1914 in a different form the amount of savings deposits and of time certificates of deposits in *all* kinds of banks as the enormous sum of $8,675,000,000.

either mistaken judgment or dishonesty on the part of the bank officials.[8]

Savings banks seek to keep invested as large a part as possible of their assets, keeping only in ready cash enough to meet a possible temporary excess of withdrawals over deposits. In contrast with the policy of commercial banks with their demand deposits, the sound policy for savings banks is to reserve the right to require notice of intention to withdraw. The period of such notice varies from a minimum of ten days to a maximum of about sixty days. In ordinary circumstances it is not needful or usual for a bank to exercise this right, but it is a needful safeguard in times of commercial crises. This requirement of notice is greatly to the advantage of depositors collectively and thus of the community as a whole. It is not an undue limitation of the rights of the individual depositor. It is unfair for the individual, in a period of financial stress, to seek his own safety in a manner which is impossible for all, and thus to endanger the interests of all.[9]

The mutual savings banks in 1914 had (on the average) but six tenths of a cent of actual cash (and "checks and cash items") in their tills for every dollar of deposits, but in addition they had for every dollar of deposits four cents due on demand from state and national (commercial) banks. In the aggregate these demand deposits amounted to the large sum of $172,000,000, a large part of which bore a low rate of interest.

The depositors in savings banks have a direct legal claim on the bank as a corporation. The bank's only means of pay-

[8] In the last twenty-three years, on the average, seven savings banks a year have failed, the annual excess of liabilities over assets being about $200,000, or about $30,000 for each failing bank. The total loss has been about 1/6 of 1 per cent of total deposits.

[9] The Federal Reserve Act, by making it possible for loans to be had at any time (through member banks) on good security, should reduce the danger of runs on savings banks.

ment are its assets, consisting of claims upon the owners of such wealth as houses, factories, railroads, electric light plants, good roads, and school buildings. Thus virtually the depositors have by their savings made possible the building and equipping of these actual forms of wealth, and have an equitable claim upon the usance of them, which claim is met by the payment of interest and dividends to the savings banks. Viewed in this way the great social importance of the savings function appears, and the importance of developing the savings institutions.

§ 7. **Postal savings plan.** In many countries of the world the governments have not only authorized private, corporate, and trustee savings banks, but have provided public agencies where it is possible for the citizens to deposit small amounts. Thus municipal, and what are called communal, savings banks are operated by many European cities; but the most effective and widely used agencies for the purpose are the national post-offices. Postal savings banks, or postal savings systems as divisions of the postal service, are now found in all the larger countries of the world, and in many smaller ones. The United States of America was almost the last civilized country to establish such a system, which was authorized by act of Congress in 1910, and went into operation in a few designated cities in January, 1911. The number of offices at which it was in operation was rapidly increased, and the number in 1914 was about 10,000.

Any one ten years of age may become a depositor. Deposit must be made always in multiples of one dollar. Not more than $100 will be accepted for deposit in any one calendar month, and nothing after the total balance to the depositor's credit is as much as $1000, exclusive of accumulated interest. However, amounts less than one dollar may be saved for deposit by purchasing a ten-cent postal savings card and affixing ten-cent postal savings stamps until the nine blank spaces are filled. Such a filled card will be accepted as a deposit of

one dollar either in opening an account or in adding to an existing account.

Deposits are not entered in a depositor's book, as is the usual practice of savings banks, but are evidenced by certificates issued in fixed denominations of $1, $2, $5, $10, $20, $50, and $100. These bear interest, from the first day of the month next following that in which the deposit is made, at the rate of 2 per cent per annum for a whole year (interest is not paid for any fraction of a year). Interest is not compounded, unless the depositor withdraws the interest and redeposits it, but simple interest continues to accrue annually on a certificate so long as it is outstanding, without limitation as to time.

By the end of the first year (1911) of operation the savings system held a balance to the credit of depositors of nearly $11,000,000; in the next year (1912) there was added to this about $17,000,000; in the next year (1913) about $12,000,000; and this average rate of one million dollars a month net addition to deposits has continued to the present (1916). These funds are deposited in banks belonging to the federal reserve system, which must deposit with the Treasurer of the United States designated kinds of bonds (national, state, and municipal) as security and pay interest at the rate of 2½ per cent on the amount of the deposits. The one-half per cent difference between this rate and that paid to individuals goes far toward paying the expense of operating the system.

Provision is made for the issue of postal savings bonds in exchange for certificates issued in sums of $20 or multiples thereof up to $500. These bonds bear interest at the rate of 2½ per cent payable in semi-annual instalments, January 1 and July 1. These bonds are not counted as a part of the $500 maximum of deposits allowed to one person, and there is no limit to the amount of bonds which may be acquired by one depositor. Postal savings bonds are exempt from all kinds of taxes, federal and local. These bonds are issued only on the surrender of postal savings deposits, but may be sold by

the owner at any time. Three years after the law went into effect, there were $4,635,820 of postal savings bonds outstanding.

§ 8. **Advantages of the postal savings plan.** As compared with corporate savings banks the postal savings system has certain advantages.

(a) It protects the small depositors from the danger of dishonest private bankers who have preyed upon the immigrants in the larger cities. To foreigners, accustomed to the postal savings plan in their home countries, it is especially useful.

(b) It gives to every depositor the greatest safety possible, as "the faith of the United States is solemnly pledged" for the repayment of depositors.

(c) It brings a savings institution to many a small town and rural place formerly entirely lacking in facilities for small depositors. The benefit of this has not immediately appeared to be great, but may in time prove to be.

(d) It pays interest from the first of the month following the date of deposit whereas the usual practice of savings and commercial banks is to pay only from the beginning of the quarter year or half year.

(e) It provides for the exchange of deposits for bonds bearing a higher rate of interest—a unique feature greatly simplifying for the small saver the process of buying bonds for more lasting investment.

In some respects, however, the postal savings system falls short of the advantages of the regular savings banks. These usually accept for deposit as small an amount as ten cents; they pay interest either quarterly or semi-annually; they pay on the average (at present) almost double the rate of interest, and the interest is credited to the depositor's account at stated intervals and automatically compounded. The postal savings system, as the law now stands, may be looked upon, therefore, as supplementing the regular savings banks rather than competing with them.

§ 9. **Collection of savings and education in thrift.** Small savings have been encouraged in many places by penny provident funds, dime savings banks, and school savings funds, which have been conducted at public schools, social settlements, and factories, by school officers and by charitable and educational societies acting through canvassers. These plans all call for much personal effort and cost, which must be provided by volunteer services and private gifts. These plans being undertaken mainly as a means of education in thrift and in the related moralities, their results are not to be measured merely by the magnitude of the sums collected. They are not rivals of the ordinary savings banks, but rather auxiliary methods of encouraging their use. The funds collected by these agencies are usually deposited in local savings banks, and depositors are encouraged to open individual accounts there, whenever they have considerable sums saved.

In Germany the public schools have been furnished with automatic stamp vending machines, from which savings stamps in as small denominations as ten pfennigs (2½ cents) may be had by dropping a coin into a slot.[10] This method could be used very effectively in connection either with the postal savings system or with a local savings bank. It ought to be made easy to deposit funds at every school house, at every post-office, at every factory counter on pay day, and wherever people pass in numbers. Allurements to foolish expenditures meet old and young at every turn; to spend the dime is made all too easy, whereas to save it and deposit it in a safe place too often calls for wasteful and discouraging efforts from the person of small means.

§ 10. **Building and loan associations.** Building and loan association is the name applied to a coöperative organization of persons with the purpose of collecting regularly from members small sums which are loaned to some members for the

[10] The author saw in operation a new machine of this kind which had been installed in a German public school as early as 1910.

purpose of building or paying for homes.[11] The first association of this type was organized in Frankford, Pennsylvania, in 1831. It and others of its kind have made Philadelphia notable among all the larger cities as "the city of homes." The number of such associations has almost steadily increased in the United States. Pennsylvania continues to rank first in respect to amount of total assets, with Ohio a close second, and New Jersey third (tho ranking first in proportion to population). Associations of this type have been hardly second in importance in America to the savings banks as institutions for savings for persons of moderate means. The number of their members (nearly 3,000,000) is about one-fourth of that of savings bank depositors, and the amount of their assets (1¼ billion dollars) is about one-fourth that of the reported savings banks. But their relative influence in educating and encouraging to thrift is doubtless much greater than these figures indicate. There are more than three times as many of them as of reported savings banks, their management is much more democratic than is that of the banks, and many of their members attend and participate in the meetings and understand how they are conducted. Moreover, the savings made through these associations are constantly passing on into the houses that are fully paid for, and which continue to yield their incomes to their owners. Each year these associations collect from their members as dues and in repayment of loans (made to build houses) the sum of over half a billion dollars, which is twice as much as the annual increase in the deposits of the reported savings banks.[12]

§ 11. **The main features.** A building and loan association

[11] See Vol. I, pp. 290, 297–298, 484, and 486.

[12] The figures here given and the description of methods apply to the "local" building and loan associations. The success of this kind led to the organization of other associations which took the name "National" building and loan associations, to carry on a business in a larger field. The number of these has always been comparatively small, and their operation is less simple, democratic, and economical

is organized by a group of persons in a neighborhood, uniting to form a corporation under the laws of the state, every member to subscribe for one or more shares. The officers elected all serve without pay excepting the secretary-treasurer, who receives a small fee for his services. All official meetings are open to all members. The shares vary in denomination from $25 to $200; the larger figure being common under the serial plan and $100 being usual under the continuous (or permanent) plan, described below. Whenever there is a sufficient sum it is loaned to one of the members for the purpose of building a house. The borrower must subscribe for shares to the par value of his loan.

The receipts of the association are of several kinds.

(a) Interest is received from members, usually at the rate of 6 per cent, and from banks at a lower rate on the small working cash balances kept on deposit. Usually the loans made are large enough to cover a large proportion of the cost of the house, but the land on which the house stands must be free from all incumbrance, and its value gives a margin of safety to the association. Then by the method of payment of dues the debt is, from the first month, steadily reduced and the security for the loan therefore grows constantly better.

(b) Premiums are collected in addition, sometimes in the form of a higher rate of interest, but the practice of charging premiums has been mostly abandoned and the total amount of premiums now constitutes less than 1 per cent of all payments from members.

(c) Fines for delinquency also are less commonly imposed now and constitute a small fraction of 1 per cent of total payments.

(d) Deductions are made on account of withdrawal before the maturity of the shares; under these circumstances it is usual to pay a portion but not all of the accumulated profits,

than the local associations. They have borne more of the nature of ordinary profit-making enterprises. They should not be confused with the local associations.

sometimes a proportion increasing as the shares approach maturity.

Different plans have been and still are followed in respect to the method of issuing the shares. Under the *terminating plan* all the shares begin and mature at the same time (for all members that continue to the end). Whereupon the association dissolves or starts anew. The chief difficulty in this plan is that the association has too few funds to loan at the beginning of its career, and a surplus of unloanable funds as it nears the maturity of the series. It is therefore necessary to encourage or to compel the withdrawal of non-borrowing members on the payment of estimated profits to date.

The better to remedy this difficulty the *serial plan* was devised, by which new series of stock are issued at intervals—yearly, half-yearly, quarterly, and even oftener.

§ 12. **The continuous plan.** A further development is the continuous plan (usually called the *permanent* or the Dayton plan), by which much greater flexibility is attained in the organization. Shares of stock may be subscribed for at any time, each man's separate subscription of shares being treated as a separate series, and maturing each at its own time. There is thus, after an association has been for some time in operation, a continuous stream of new members (or new subscriptions) flowing into the association, and a continuous outflow of shareholders whose shares have matured. The maturing shares of borrowing members discharge their indebtedness to the association; the maturing shares of non-borrowing members are paid in money, or may (if the association has use for the funds) be left as an interest-bearing loan.

Additional funds are obtained when needed by issuing paid-up stock to non-borrowers. This is convenient at the beginning of an association and when the movement in building is more active than usual. But if an association has funds that cannot be loaned, outstanding paid-up stock may be called in. In practice a large part of the paid-up stock as well as of the running stock is subscribed for and held not by

large capitalists but by persons of small means, especially "the more frugal element in the working classes." Non-borrowing members desiring to withdraw may do so at any time under certain conditions; but to safeguard the association, the laws usually require that thirty days' notice of intention to withdraw shall be given, that not more than one half of the funds received in any one month shall be paid on withdrawals, and that withdrawing shareholders shall be paid in the order of the notices of intention to withdraw.

The most intelligent and prudent workers were formerly deterred from subscribing by the fear that sickness, unemployment, or other mishap might make it impossible to keep up regular payments. Now, however, fines for late payment have been almost entirely done away with. On the other hand, extra payments may be made at any time by borrowing members, to hasten the date when their shares mature and their debt be discharged. These privileges are possible because of the method of distributing earnings which will now be described.

§ 13. **The distribution of earnings.** Every six months is ascertained the amount of the gross earnings which, under this plan, consist almost entirely of interest paid on loans. From this amount are deducted expenses (and in some states 5 per cent of the total is placed in a "loss fund" to meet possible losses) and the rest is divided in proportion to the amount standing to the credit of each member, being credited to the account of running stock and paid in cash to holders of paid-up stock.

The payment of dues is correspondingly simple. The dues at twenty-five cents a week amount to $13 a year per share of $100. This is the whole bill; there are no extras. The interest at 6 per cent (the usual rate) is $6, and the rest, $7, is credited upon the stock. Thus at the end of the first six months the member has $3.50 to his credit, and is entitled to his share of the net earnings on that amount. Thus his share of the earnings is steadily increased by compound interest,

and if he keeps up his regular payments the shares mature in about sixteen years. This means in most cases that a prudent tenant can become the owner of a house in sixteen years while paying no more than the rent would be. As the active investor he becomes his own rent collector and uses the house with less need of repairs, thus dispensing with services and costs which are included in contractual rents.[13]

These associations are properly made subject to supervision and examination by state officials, in the manner of that exercised over banks. They have been favored by exempting the shares of members and the mortgages held by the associations from all state and municipal taxation. As the houses built or paid for are taxed, this is of course but just, but it is an exception to the rule of the illogical general property tax.[14]

§ 14. **Possible developments of savings institutions.** The social importance of increasing and improving the agencies of savings for the masses is being more fully recognized, but much more might be done in these directions. Some possible changes have been suggested above, and a few words more may be added.

Probably the greatest developments in the near future will be through the savings departments of commercial banks (favored by the reserve rules of the Federal Reserve Act) rather than by the increase in the number of special banks for savings. The initial expense and risk of starting a savings bank is considerable, and outside of cities of some size this is prohibitive. Whereas a savings department, with its funds and reserves separated, can be easily and cheaply operated in connection with a general bank. It is much to be desired, however, that a larger measure of popular coöperation might be made possible to the depositors, both for its educational value and to reduce the real evil of the autocratic or the plutocratic centralization of the money power in the small communities.

Savings banks usually limit the amount of an account to

[13] On these economies, see Vol. I, p. 298.

[14] See ch. 17, sec. 4.

$3000. It is desirable that depositors should be able easily to convert their savings-bank deposits over certain amounts into good bonds, bearing a higher rate of interest (after the method of the issue of postal savings bonds). There is need of a central market in each community where such bonds can be bought and sold at any time; and the savings banks might easily serve to buy and sell for their customers in this way in the larger bond market. This would be of benefit also to the states and municipalities which issue bonds for such purposes as schools, roads, and public utilities, by creating a more open and regular market to small investors than now is provided for such securities. This might somewhat reduce the rate of interest and there would be a gain divided between taxpayers and lenders.

The general plan and principles of local building and loan associations might well be extended to groups of rural coöperators, enabling them to make loans to their members; and to groups of small investors, permitting them to hold real estate mortgages and bonds and stocks of corporations, free from taxation other than that paid on the wealth itself. Members of such organizations could get a higher income on their investments than a savings bank could pay, and with greater security than if each attempted to save and invest by himself.[15]

Savings institutions are necessarily also lending institutions. In this chapter they have been looked at mainly from the saver's (the lender's) standpoint, though their service to the borrower is of coördinate importance. In the case of building and loan associations this feature is most apparent. Later, the problem of the agricultural borrower will receive further consideration.

[15] Since this was written the Federal Rural Credits Act has been passed, embodying the main idea here described.

CHAPTER 12

PRINCIPLES OF INSURANCE

§ 1. Chance, unavoidable and average. § 2. Uneconomic character of gambling. § 3. Borderland of gambling. § 4. Insurance: definition and kinds. § 5. Insurance viewed as a wager. § 6. Insurance as mutual protection. § 7. Conditions of sound insurance. § 8. Purpose of life insurance. § 9. Assessment plan. § 10. The reserve plan. § 11. The mortality table. § 12. The single premium for any term. § 13. Level annual premiums and reserves. § 14. Different features of policies. § 15. Insurance assets and investments as savings. § 16. Excessive costs of insurance operation.

§ 1. **Chance, unavoidable and average.** Every action and every movement in life has in it some element of chance. There are what may be called natural chances, arising from the uncertainties of the seasons, or from rainfall, heat, hail, storm, flood, lightning, or land-slides. Such chances must be taken both by the small enterpriser and by the large. In earlier conditions of society natural chance dominated industry, and it still remains and must always remain important. There is the chance of unexpected political events, such as war, riot, and legislation on money, tariffs, credit, and business relations. These things are caused, it is true, by the action of men, but it is a collective action out of the control of the individual. There is the chance of human carelessness causing fire, explosions, and wrecks on misplaced switches. There is the chance of physical or mental collapse, as the sudden insanity or the sudden death of one performing responsible duties. There is the chance of sickness that often wrecks the plans and the fortunes of a whole family. There is the chance of economic alterations in methods of production

and of transportation, in fashions and demand in this direction or for those materials.

Some of these chances are more connected with money-lending, others with manufacturing, some with agriculture, others with commerce; but all are present in some degree in every industry. Some events are unique in nature and seem unlikely ever to occur again; others are of a kind occurring so irregularly that no reasonable prediction can be made as to the time and frequency of their occurrences. Still others occur frequently and to many different persons; but no individual can tell when and how they will occur to him. A general average of chances in different lines of business causes some to be called safe, others extra-hazardous. Chance has its favorable as well as its unfavorable aspects. Chances are averaged and added algebraically to the profit or loss in an industry, for an extra-hazardous enterprise must in general afford a higher average of profit in order to induce men to engage in it. It is folly to take a risk without ascertaining its degree so far as general experience enables one to choose. But inasmuch and in so far as the gains and losses fall unequally upon different individuals, income depends upon chance.

§ 2. **Uneconomic character of gambling.** This prevalence of chance sometimes tempts men to say that business is "a gamble." But a distinction in principle must be made between gambling and legitimate risk-taking. The chances enumerated above are not sought, but avoided as far as possible; yet they must be borne by some one if productive enterprise is to continue, and the burden must somehow be distributed throughout the community. Gambling is, however, a kind of risk-taking which has a very different economic and moral quality. Gambling creates the hazard, making the gain or loss of income depend on an event that is not a necessary part of productive enterprise. Typical gambling is the transfer of wealth on the outcome of events absolutely un-

predictable, so far as the two gamblers are concerned. Examples are the shaking of unloaded dice or the honest dealing of a pack of cards, and the betting on prices in so-called "bucket-shops" by persons having no connection with the market of real things, and seeking to get something for nothing as a result of mere chance.

Cheating is not a necessary mark of gambling, altho the cruder forms of dishonesty, such as the loading of dice or the collusion of horse-owners or of horse-jockeys to deceive the betting public, are so common that they seem often to be an essential feature. Gamblers recognize fair as opposed to unfair methods. Fair gambling is a kind of minor morality within the immoral field of gambling, like the honor found among thieves. The chance-taking in gambling has no useful purpose or result outside itself. Betting and gambling do not produce wealth, but merely shift the ownership of existing wealth. The gamblers constitute themselves a little fictitious economic circle, and they transfer gains and losses on the turn of events that have no practical objective result within their circle except to determine the direction of the transfer. Even when fairest, gambling must, in its average results, be uneconomic. In any economic trade each trader gains by getting goods that are, on the marginal principle, to him more valuable than the other kinds of goods he gives up.[1] But in gambling the winner gets all, the loser gets nothing. If two men of like incomes gamble the additional desires that the winner is able to gratify are (by the principle of decreasing gratification) less in amount than the desires which the loser must forego. As a result the loser is often depressed and seriously injured by the loss of his income, the winner makes reckless and extravagant use of his winnings. Easy come, easy go, is the rule of gamblers.

Moreover, gambling reduces the amount of wealth by relaxing the motives of economic activity, diverting energy from

[1] See Vol. 1, ch. 5, sec. 7.

productive enterprise, tempting men into dishonesty to offset their losses, and leading them into speculation and embezzlement.

§ 3. **Borderland of gambling.** Ranging between the extremes of unavoidable risk-taking and of gambling are a number of cases of a mixed nature. In nearly all wagers, judgment in some degree influences the choice of sides. One man bets on a horse whose pedigree and performances he knows thoroly; another judges by the horse's appearance as it comes upon the track. The professional bookmakers have the latest possible and most exact information on which to base their bids.

In the bets made on one's own prowess, as on speed in running, the chance-taking is still on the uneconomic side of the borderland, certainly if the running is for the sake of the wager, not for pleasure or for a useful purpose. A premium won by a runner for speed in delivering a message of economic importance presents an essential contrast to the winnings in a wager.

Finally, the very borderland of difficulty is reached in the purchase and sale of goods in the market with a view of profiting by chance changes in price. The purchasing and holding of land, lumber, grain, cattle, and other tangible and useful things, that need to be stored, held for buyers, or taken to market, must be judged liberally. The quality of gambling depends somewhat on the motive as well as on the ability of the trader. The enterpriser dealing with real wealth, and fitted to take the risks both because of his resources and of his exceptional knowledge, needs the motive of gain in such cases, and in a sense can be said to earn socially what he gets. The motive of the uninformed must be a blind trust in luck, and a hope to gain from a rise in prices which they are quite unable to foresee or to explain.

§ 4. **Insurance: definition and kinds.** The large element of luck in industry due to unavoidable chances has something of the same evil character as gambling. It brings unearned

prizes to some and to others unmerited losses. It must therefore be a benefit to the community, if this element of unavoidable chance cannot be reduced as a whole, at least to regularize it and make it exactly calculable for any individual. In this way each may be encouraged by the more certain prospect of receiving a reward proportionate to his efforts and abilities. This desirable condition has in many respects been accomplished by means of insurance.

Insurance is the act of providing a guarantee of indemnity against a financial loss that will result if an event of a specified kind occurs. The person seeking some surety against the possible loss is the *insured;* the person contracting to indemnify against the loss is the *insurer;* the written contract of insurance is the *policy;* and the price paid by the insured in fulfillment of his part of the contract is the *premium;* the amount paid when a loss has been incurred is the *indemnity;* and the person to whom the indemnity is paid is the *beneficiary* (who may or may not be the insured).

The insurance with which we are here concerned is that which gives financial indemnity. This is given for loss of expected net income, when by chance either receipts are less or costs are more than average. The two main classes as regards kinds of loss are property insurance and personal insurance. *Property insurance* is that which indemnifies for loss of one's possession in specified ways, such as by fire, by the elements at sea (marine), by hail, lightning, or cyclone, by death (of valuable animals), by robbery, and by breakage (of window glass). *Personal insurance* is that which indemnifies the beneficiary for loss of income as the result of various happenings to persons, the chief being death, accident, sickness, invalidity, old age, and unemployment. The principle of insurance is being constantly extended to new subjects [2] and it is capable of further development in a variety of directions.

[2] The Jeffries-Johnson prize-fight was insured, against rain, for $30,000. Frequently, race-horses, the fingers of pianists, the lives of ball-

§ 5. **Insurance viewed as a wager.** Insurance, without question a highly useful thing, appears, paradoxically, to be in its outer form a bet. The large merchant with many vessels used in many kinds of business had in the days before marine insurance an advantage in distributing his losses over a number of voyages. Antonio, the wealthy merchant, is made thus to express his security:

> "My ventures are not in one bottom trusted
> Nor to one place; nor is my whole estate
> Upon the fortune of the present year.
> Therefore my merchandise makes me not sad."

In its early form marine insurance was the attempt of smaller ship-owners to distribute their losses (as could the wealthy merchant) over a number of undertakings, lucky and unlucky. It became customary for a ship-owner to bet with a wealthy man that the ship would not return. If it did come back, the owner could afford to pay the bet; if it did not, he won his bet and thus recovered a part of his loss. Gradually there came about a specialization of risk-taking by the men most able to bear it. They could tell by experience about what was the degree of uncertainty, and could lay their wagers accordingly. When several insurers were in the same business, competition forced them to insure the vessel and cargo of the ordinary trader for something near the percentage of risk involved. The insurance thus tended to become a mutual protection to the ship-owners; what had to be paid in premiums to cover risk came to be counted as part of the cost of carrying on that business.

Every legitimate form of insurance exhibits substantially the same characteristics; it reduces loss at the margin where it is felt most keenly. The difference between insurance and gambling, thus, lies primarily in the purpose of insurance, which is not to increase artificially the risk that any indi-

players, and the throats of singers, are now insured. Summer hotels in England regularly insure for large sums against more than so many days of rain per season.

vidual runs, but to neutralize or offset an already existing chance. The insurance bet is what is called a "hedge." The difference lies further in the collective method of insurance, which combines the chances scattered among a number of persons. Insurance does not increase the total of risks and of losses, but merely combines, averages, and distributes them equally among all the insured. This eliminates the chance element to the individual by converting it into a regular cost.

§ 6. **Insurance as mutual protection.** Modern insurance is conducted either by enterprisers for profit, or by mutual companies; but in any case in large measure the losses in insurance are mutually shared, as the premiums (plus interest earned) equal the total losses plus operating expenses and profit, if any is made. Each insured gets a contract of indemnity for the payment of a sum that will help cover the losses of others. Such an exchange is mutually beneficial. The premium comes from marginal income; the loss if it occurs would fall upon the parts of income having higher value to the insured. The less urgent needs of the present are sacrificed in order to protect the income that gratifies the more urgent needs of the future. In insurance each party gives a smaller value for a greater; each makes a gain. The greater security in business stimulates effort. This effect is quite the opposite of that of gambling.

§ 7. **Conditions of sound insurance.** To be economically sound, insurance must have to do with real productive agents, and with a group of occurrences which, as a whole, are approximately ascertainable in advance—however irregularly they may fall upon individuals. The beneficiary must have an *insurable interest* in the property or person insured; that is, the beneficiary must actually suffer a loss by the occurrence insured against. Finally, the amount of the indemnity must not be greater than the loss incurred. Some of the greatest difficulties in insurance arise from the absence of these essential conditions. When there is no insurable interest or when the indemnity is greater than the loss that may be incurred,

the beneficiary may and sometimes does find it to his interest to bring about the socially injurious event insured against. He artificially increases the loss against which insurance was taken. When the insured sets fire to his own buildings, he makes an illegitimate use of insurance. Constant efforts are made by insurance companies to guard against these "moral risks," the least calculable of any. Merchants whose stocks have been mysteriously burned two or three times find difficulty in getting further insurance. Formerly insurance was not paid in case of death by suicide; but now usually no such limitation is contained in a policy after a period of one or more years. As men rarely plan suicide years in advance, death by one's own hand some years after taking life insurance is regarded as coming under the ordinary rules of chance. Yet it is to be feared that this liberal policy serves as a temptation at times to crime and to self-destruction.

§ 8. **Purpose of life insurance.** Property insurance is mainly an aspect of enterpriser's cost, whereas personal insurance is more closely connected with the object of saving.[3] We shall in the rest of this chapter limit the discussion to the one most important form of personal insurance, that called life insurance (sometimes called survivors' insurance).

Life insurance is that form of insurance in which partial indemnity is provided for survivors against the financial loss incurred by the death of the insured. Usually the insured is the breadwinner of the family and the beneficiary is a member of his family, but in an increasing number of cases the beneficiary is the surviving business partner, a creditor, or a business corporation with an insurable interest in the life of one of its employees.

Life insurance has been much used by persons mainly dependent on labor incomes[4] rather than on incomes from capital, by those receiving salaries, professional fees, and by active

[3] On the former, see Vol. I, pp. 365 and 374; and on the latter, below, sec. 14.

[4] See Vol. I, labor-incomes, in Index.

business men. It has of late been extended rapidly, as "industrial insurance" to wage earners, in policies never exceeding $1000, but averaging very much less, and often being for no more than enough to pay funeral expenses. The premiums on such policies are usually collected weekly and by agents making personal visits. The cost to the insured is, therefore, necessarily very high in proportion to the amount of insurance.

§ 9. **Assessment plan.** Life insurance plans may be distinguished, with reference to the time and method of collecting the premiums, as assessment and reserve insurance.

In the simple form of assessment insurance originally the losses were paid by contributions taken after the losses occurred, each member paying an equal share without regard to age. In a slightly improved plan the assessments are made at the beginning of the year, based upon the expected mortality for the year. The sum just sufficient for this purpose (omitting expenses) is called the *natural premium*. The cost of such insurance is closely related to the average age of the members. The rates are very low in a new organization with a membership of young men; but each year the average age, and therefore the mortality of the membership, rises and the annual assessments must be increased. By constant additions of young members, this rise of cost may be retarded. But when these members grow older, a still larger addition of young members is required to keep down the average, and the mathematically inevitable result is an increasing rate of assessment. This keeps young men from entering, and finally results in failure or in some form of "reorganization" that drives out the older members. The assessment plan carries with it the seeds of its own decay.

To meet these difficulties in part, various modifications of the flat-rate assessment plan are employed, such as classification by age at entry, so that each member pays a flat-rate according to age at entry; or large initiation fees at entry which form a temporary "reserve" to offset increasing mortality in late years. Finally, the policies may be issued on the natural

premium plan, by which the members of each age class pay exactly what the insurance costs for the year. Under this plan the company will remain solvent, but with this and all the other expedients the surviving members are forced to drop the insurance in later years.

Assessment insurance is sold by business companies organized for profit, by fraternal orders, and by various types of mutual organizations. The business companies have had a dismal history of hardship to surviving members and of eventual failure. They are disappearing under the influence of hostile legislation resulting from a better popular knowledge of insurance principles. The fraternal orders combine insurance with other objects of a benevolent and social character. With good management, a favorable death rate, and very low expenses, some of them have provided protection at very low rates for many years. Others have failed with disappointment and disaster to the older members. Still others are struggling with difficulties that presage dissolution. Many now have some form of reserve accumulations, and some have so improved their methods that they closely resemble reserve companies. The assets of all the assessment companies are now $1.37 per $100 of insurance in force, while the legal reserve companies have $22.66. The assessment companies now get 10 per cent of their total incomes from their funded investments, as against 24 per cent for the old-line companies. Even with the favorable conditions under which the fraternal orders conduct their insurance business they are doomed to failure unless they adopt rates and policies based upon adequate reserve accumulations. Many thousands of present members are paying for insurance at rates which will not suffice to meet the future losses. The assessment plan fails to eliminate the one great risk, that of leaving the survivors without insurance in advancing years.

§ 10. **The reserve plan.** The reserve plan, if honestly administered, gives complete protection against the difficulties just indicated. The essential purpose of the reserve plan is to

collect during the earlier years of the insurance policy when the mortality is less, a sum larger than is needed to meet the current losses. This sum, the reserve, is kept invested and accumulating an income, sufficient to offset the increase in losses as years advance. In reserve insurance, therefore, the premium never increases from year to year, altho it may be so arranged as to diminish or to cease entirely sometime within the term for which the insurance continues.

The premium must always be fixed in advance. The calculations for determining the premiums on different kinds of insurance policies are many and complex, but all conform to a few general principles. The three factors assumed are an average mortality table, a rate of interest (or yield on investments), and an expense rate in proportion to the premiums or outstanding insurance. Insurance on the reserve plan is often called "scientific insurance" because, upon the basis of these assumptions resulting from experience, it makes exact mathematical calculations of the premiums and reserves needed for insurance of any particular kind in respect to age of insured, number of payments, method of paying the beneficiary, and any other conditions. The premium thus fixed is, however, only a maximum, and usually is reduced as the result of conditions more favorable than those assumed.

§ 11. **The mortality table.** When large numbers of men are taken as a group, a certain proportion of those at each age may be expected to die. A mortality table starts with a group of persons, as 100,000, at a given age, as 10 years, and shows the number who die and the number who survive at each year of age until all are dead. The table most widely used in the United States is the American Experience Table of Mortality, constructed by Sheppard Homans in 1868. The figures of this table, at different years, are given below:

Age	*Number Living*	*Deaths each year*	*Death rate per 1,000*
10	100,000	749	7.49
20	92,637	723	7.80
30	84,441	720	8.43

Age	*Number Living*	*Deaths each year*	*Death rate per 1,000*
35	81,822	732	8.95
40	78,106	765	9.79
50	69,804	962	13.78
60	57,917	1,546	26.69
70	38,569	2,391	61.99
80	14,474	2,091	144.47
90	847	385	454.54
95	3	3	1,000.00

The actual number of deaths of any group of insured will not correspond exactly with the figures of any mortality table. But this is not an essential defect of a table so long as the figures of the table are approximately correct and are at least as great in the earlier years as the actual mortality. For any excess of premium thus collected but increases the safety of the insurance and reduces later payments. In fact the mortality in nearly all companies in the United States is much below the figures of the American Experience Table, partly because of the influence of medical selection on the recently insured and partly because of the decided improvement in longevity since the table was constructed.

§ 12. **The single premium for any term.** It is evident that the natural assessment premium payable at the beginning of the year for $1000 of insurance for that year is expressed by the death rate, e.g., at age 35, the payment of $8.95 by each of the 81,822 living at the beginning of the year will provide the $732,000 needed to pay the losses.[5]

In the same manner would be determined the natural assessment premium for each year of insurance. Now, when it is possible to invest the premiums so as to yield a minimum rate of income it is a simple matter to determine the amount

[5] There is an appearance of a slight discrepancy due to the omission of fractions of cents. If premiums are collected at the beginning of the year and losses are paid at the end of the year, and if interest can be earned meantime at the rate of 3½ per cent, the natural premium for a one year term policy is about $8.64, that being the present worth of $8.95 due a year hence, interest being 3½ per cent. In these calculations there is no allowance for expenses, the necessary "loading," on which see below, sec. 14.

of a single premium, at any age, that is adequate to pay for insurance covering any selected number of years (term insurance) up to the entire period of each insured person's life (full life). It is necessary only to apply the formula of present worth and that of compound interest on investments.[6] Thus the expected losses of any year according to the table of mortality, divided by 1 + rate of yield on investments raised to the power of years distant, equals the present worth of insuring the entire group for that year. The sum of the discounted cost of insurance for all the years of the term divided by the number living at the beginning of the period, gives the single premium for each of the insured. Let P be the present worth of all the policies for a group of the same age, p the present worth of one policy, X the total insured at the beginning of the period, f the natural assessment premium this year, or the natural premium required for any year. Then

$$P = \frac{f}{(1+r)} + \frac{f_1}{(1+r)^2} + \frac{f_2}{(1+r)^3} + \frac{f_n}{(1+r)^n}$$

$$p = \frac{P}{X}$$

The payment in advance of the single premium for any selected period provides a reserve fund sufficient, on the assumptions made, to carry all the insurance without further payments. Each year there is added to the fund the income earned on investments, and there is subtracted the amount of the losses for the year, until the death of the last member of the insured group. If the deaths in the earlier years are fewer than were expected in the mortality table, this will be offset eventually by more deaths at the advanced years; but in the meantime a reserve larger than was expected is yielding income, thus providing a larger sum than is needed to pay all the policies at maturity. This surplus might be distributed as so-called "dividends" from time to time to those surviving, or be added pro-rata, at intervals, to the amount of the policies as accumulated dividends.

[6] See Vol. I, p. 279.

§ 13. **Level annual premiums and reserves.** It is a matter of no very abstruse mathematics (in principle) to find the equivalent of this single premium in any one of many other forms of premium payment. The processes are mainly but variations of present worth and compound interest calculations. Such calculations, however, lead into many complexities of practical detail difficult to explain in brief compass, and are the special task of the actuary (the mathematical expert dealing with such problems in the insurance business). The most useful actuarial equivalent of the single premium is the level annual premium for any period (term or life). Almost all policies now written have the level annual premium as a feature. The amount of the level annual premiums at first is greater than the losses; this causes for a time the steady accumulation of a reserve which yields income. Then, as the losses grow, they overtake and finally surpass the amount of the annual premiums. Therefore, the total reserve for any group of insured increases year by year to a maximum and then declines until it reaches zero with the payment of the last claim. The individual reserve for each policy not yet matured increases steadily the longer it is in force. The total reserve is essential to the solvency of the company and the payment of all the policies as they fall due. The companies which issue policies on the level premium plan or reserve plan are known as "old line" companies, or as "legal reserve" companies, because the state laws require every company of this type to maintain the reserves calculated on the basis of a certain rate of yield. The growth of the legal reserve companies in recent times constitutes one of the financial marvels of the age.

§ 14. **Different features of policies.** The premiums thus far discussed are "net premiums" estimated as just sufficient to meet the actual payments required by the contracts in the policies. To provide for the expenses of management an addition is made to the net premium called the "loading." The entire premium is called the "gross premium."

Reserve insurance is still carried on by a few stock companies, but of late some stock companies have been transformed into mutual companies, which are the prevailing type. The mutual company legally belongs to the policyholders. The gross premiums in reserve insurance are, for the purpose of safety, fixed at a figure larger than the expected cost of the insurance, and normally the earnings from interest are higher, the mortality is lower, and expenses are less than those on which the calculation of rates is based. From the excess of income resulting, the company sets aside a surplus and then divides the rest among the policyholders. These returns, virtually but the refund of excess premiums, are called "dividends" (a somewhat misleading term, not to be confused with dividends on corporate stock). The policies that receive dividends are called "participating" and are said to participate in the earnings. Formerly the majority of policies paid "deferred" dividends after 5, 10, or 20 years, according to various tontine and semi-tontine plans, the survivors to these periods receiving their dividends plus those of the other policyholders who had died or had withdrawn from the company. This form of payment having been found objectionable, it was made illegal in New York and other states, and in most cases dividends are now paid annually. The stock company, organized for profit, frequently charges lower premiums for "non-participating" policies, and then retains such profits as may result from keeping expenses below receipts.

The most popular policies are term policies (usually for 5, 10, 15, or 20 years); ordinary life policies with annual premiums; limited payment life policies (the policy payable at death, with premiums fully paid up after 10, 15, or 20 years); and endowment policies (the face of the policy payable after 10, 15, or 20 years if the insured is still living). An endowment policy must be understood to be a regular term policy of insurance for the specified number of years, plus a plan of regular annual savings, which at compound interest, accumulate to the face of the policy. Many persons are attracted to

endowment insurance by the oft expressed thought that "you don't have to die to beat it." But this is a mistaken thought. For the premium in endowment insurance is much higher than that for life insurance alone during the same period, so that the endowment is merely a pretty convenient but somewhat costly plan of saving, hitched on to an insurance policy, with which "actuarially," it has no essential connection. In "scientific" insurance the insured pays its full actuarial cost for each additional feature of the policy that he buys. The various policies issued by a company are approximately equivalent actuarially, on the basis of the assumptions made, but they are of very different degrees of desirability, in view of the circumstances of the insuring individual. The choice of policies deserves a more careful investigation than it usually received. Moreover, carelessness and ignorance in the choice of a company is responsible for widespread loss and suffering.

Policies differ in respect to the mode of payment. The payment usually takes the form of a lump sum payment at death or at the maturity of the endowment. In recent times there has been a growing use of optional forms of payment which give to the beneficiary annual or monthly installments for a definite number of years or for life.

§ 14. **Insurance assets and investments as savings.** The discussion of savings institutions in the last chapter left unmentioned insurance, which probably is destined to be the most important of all. The assets of life insurance companies in the United States have already attained the enormous sum of $5,000,000,000, a sum equal to the reported savings bank deposits. In the last twenty years life insurance assets have more than doubled in each decade, and are now increasing by about a quarter of a billion dollars every year.[7] These great funds, which in equity nearly all belong to the policyholders, form already approximately one thirtieth of all the private capital of the country. They are invested in many ways, in

[7] The following are the chief statistical facts regarding the life insurance business in the United States, Jan. 1, 1914, showing separately

real estate, in loans secured by mortgages on real estate, in bonds—municipal, railroad, and industrial. The problem of wise legislation for these organizations, of their competent and honest management, and of their relation to the social, business, and political life of the nation, is certain to be of ever-increasing importance. We are hardly more than emerging from the experimental stage of life insurance, hardly more than at the beginning of its development.

The premium in personal insurance (life, accident, sickness, invalidity, old age pensions) is in almost all cases paid out of some current income. The premium paid is just so much subtracted from the amount available for present direct use and applied to the purchase of future incomes for one's self or family. The insurance method differs from the method of depositing savings by its contingent nature, the resulting income of any individual being possibly much greater than the amounts actually saved (e.g., when the insured dies or is injured soon after taking insurance), and possibly less or nothing at all. A very desirable kind of insurance which is yet little developed is that for a term ending with the usual re-

legal reserve and assessment companies, and the total.

	Number of Companies	*Policies in force*	*Insurance in force*
Legal reserve	260	38,206,000	$20,256,000,000
Assessment	605	8,789,000	10,023,000,000
Total	865	46,995,000	30,587,000,000

	Premium income	*Total income*	*Per cent income from premiums*
Legal reserve	$715,000,000	$ 946,000,000	75.6
Assessment	138,000,000	153,000,000	90.2
Total	853,000,000	1,099,000,000	77.6

	Payments to policyholders	*Assets*	*Assets for each 100 insurance in force*
Legal reserve	$470,000,000	$4,659,000,000	$22.66
Assessment ..	106,000,000	195,000,000	1.37
Total	576,000,000	4,854,000,000	15.87

tirement age (say 65 years) combined with an old-age pension for life thereafter.

It is probable that abstinence will more and more express itself not in accumulating large capital sums to provide for one's old age or for survivors, but in providing insurance for survivors, and invalidity and old-age pensions for the insured and others, payable as terminable annuities. In any case the results to be expected in the changing forms and magnitude of private fortunes are certain to be great.

§ 15. **Excessive costs of insurance operation.** So beneficent is insurance that the enormous cost of transacting the business under present methods is much to be regretted. A very large part of the premiums paid by the insured is retained by the companies.[8] In the case of reserve life insurance a considerable part of what is not returned is, however, set aside as reserve virtually held in trust for the policyholders. In the case of the other kinds of insurance, nearly all of the amount not returned is either cost of operation or profits, tho it must be recognized that a part of the cost of some kinds of insurance is for real services, such as inspection and fire prevention. It is remarkable that the percentage returned by the life insurance companies, accumulating, as they do, large reserves in trust for the policyholders, is greater than it is for the other kinds of companies (fire, marine, casualty, surety, liability, accident, and health insurance).

[8] In 1913 the total premiums collected by all kinds of insurance companies reported (Statistical Abstract of the U. S., 1914, pp. 549–557) were about $1,512,000,000, and the amount returned to policy holders the same year was $918,000,000, or about 61 per cent of all premiums, the amount not returned ($584,000,000) being 39 per cent.

	Premiums received	*Returned to policyholders*	
		Amount	*Per cent*
Life insurance reserve companies	$ 715,000,000	$470,000,000	67
assessment companies	138,000,000	106,000,000	76
Other kinds	659,000,000	342,000,000	52
Total	$1,512,000,000	$918,000,000	61

It is a striking evidence of the importance of the marginal principle [9] that insurance at such a cost should still be desired by men. The use of insurance would be much wider and its benefits greater if this "tare and tret" of doing the business could be reduced. It seems a reasonable hope, now that the experimental stages are passed, that this may be done. In the case of all kinds of insurance as yet a large expense for agents has been necessary to educate men to see the value of insurance and to purchase it, as well as for many other competitive expenses. It has been found that much of this expense can be saved by insurance in groups (for all employees in an establishment), by compulsory insurance (as of all working men), and by central state administration serving to regularize and unify the organizations. This important question will be further considered in connection with "social insurance" as a measure to benefit the working classes.

[9] See above, secs. 2 and 5.

PART IV
TARIFF AND TAXATION

CHAPTER 13

INTERNATIONAL TRADE

§ 1. Political and trade boundaries. § 2. Benefits of international trade. § 3. Choice of the more advantageous occupations. § 4. Persistence of differences between nations. § 5. Doctrine of comparative advantages. § 6. Equation of international exchange. §7. Balance of merchandise movements. § 8. Cancellation of foreign indebtedness. 9. Par of exchange. § 10. International monetary balance and price-levels.

§ 1. **Political and trade boundaries.** By international trade is meant, in general, trade between persons resident in different countries; comparatively rare is the case in which one of the two parties to a trade is a whole nation acting through its government as a unit (e.g., in the purchase of munitions of war in neutral countries). Outside of a communistic group such as the family, trade is a necessary accompaniment of division of labor. As territorial division of labor began between neighboring tribes,[1] international trade was the earliest kind of regular interchange of goods. Indeed the very word "market" meant originally the boundary between tribes. Thus, from primitive times when wandering savages gave bits of flint or copper in return for salt or fish, individuals have sought to adjust their goods to their desires through trade with men of other political groups. With the progress of the world in the means of communication and transportation, international trade has widened in extent and grown in volume.

Economic relations never have been coextensive with political relations. The economic groupings of men connected by a network of trades never have and never will correspond very nearly with political groupings of men bound together by

[1] See Vol. I, ch. 17, sec. 10.

common citizenship in particular states. Indeed it is not uncommon for many of the residents in two adjoining states to trade far more with each other than they do with their own fellow citizens. Lawmakers and rulers from the beginnings of formal governments have constantly tried to hinder this kind of trade. They have done this chiefly because of their belief that they could strengthen their states in political and economic ways, and could favor some of their citizens, by confining economic relations within political boundaries—if not exclusively, more closely than when trade was left to take its natural course, guided by individual motives. The regulation of international trade, therefore, has always constituted an economic problem of great importance in the field of political action.

§ 2. **Benefits of international trade.** Now, bearing in mind that international trade is carried on by individual traders in any two countries, we may ask what motive impels men to trade across the political boundaries of a state. The simple answer is that each trader has something to give and desires to get something in return. Each is seeking to get something that has to him a greater value than the thing he gives, and believes he can do this in trade with a foreigner better than by trading at home. In any trade, both parties gain, or think they are gaining.[2] In international trade there is the same chance for mistake as in domestic trade, but no more. In a single transaction in either domestic or foreign trade one party may be cheated, but the continuance of trade relations is dependent upon continued benefits. The once generally accepted maxim that the gain of one in trade is the loss of another is now generally rejected, but often still it is assumed to be true of international trade. The starting point for the consideration of this subject is in this proposition: Foreign trade is carried on by individuals, for individual gain, with the same motives and for the same benefits as are found in other trade.

[2] See Vol. I, ch. 5, secs. 1 and 7.

The advantages of international trade are indeed but those of division of labor in general, in the particular case where it happens to cross political boundaries. The great territorial divisions of industry are determined first and mainly by natural differences of climate, soil, and material resources. Thus trade arises easily between North and South, between warm and frigid climates, between new countries and old, between regions sparsely and regions densely populated.[3]

Territorial divisions of industry are determined secondly by social and economic differences such as those with respect to accumulation of wealth, amount of loanable capital, invention, organization and intelligence of the workers, and the grade of civilization.

Foreign trade normally imparts increased efficiency to the productive forces of each country. In most cases it is apparent that labor is more effective and gets a larger product when it is applied in those ways for which the country is best fitted and for which it offers the best and most bountiful materials; and that, further, when special branches of industry have developed at one place, they make possible the advantages of large production and of high specialization.

Certain erroneous explanations of the advantages of foreign trade may be dismissed with brief mention. It is said to give vent for surplus production and to give a wider market to what would otherwise go to waste. This involves the same fallacy as the "lump of labor notion," the destruction of machinery, and the praise of waste and luxury.[4] If it were true that sale to backward nations were now necessary to give an outlet for products which would otherwise rot in the warehouses, a time would come at length when the world would have an enormous surplus unless neighboring planets could be successively annexed. Again it is said that the great purpose of foreign trade is to keep exports in excess of imports so that the money of the country may constantly increase in

[3] See Vol. I, ch. 6, sec. 11, on the origin of markets.

[4] See Vol. I, chs. 36 and 37.

amount. The ideal of such theorists is an impossible condition where the country would constantly sell and never buy.[5] In the narrow commercial view of the subject the sole object of foreign trade is to afford a profit to the merchants, regardless of the welfare of the mass of the citizens.

§ 3. **Choice of the more advantageous occupations.** Let us consider the cases of two countries somewhat differently situated, such as an old country like England and a newer country such as was the United States in the nineteenth century. Now the relative advantages of various industries in two such countries are very unlike. The newer country excels in its broad area, its abundant rich lands, its bountiful natural resources of forests and mines. These are the superior opportunities which give the economic motives for settlement and for continued immigration from the other lands. Most of the newcomers find it to their advantage to develop the peculiar opportunities of the new land, rather than to go on producing the same things in the same way as they did in the old country.[6] Thus they get a larger quantity of products per day's labor, and are able to gain by trading a part of these for the products of the older country. Thus the characteristic industries of the two countries must differ. Without any government supervision, therefore, but simply through the choice of enterprises, each seeking the best investment of capital for himself, industries are developed in which each country is either most markedly superior, or least inferior, to its neighbors. If either laborers or capitalists in the new country were to turn to the less-favored industries they would be forced to accept a smaller reward than they can earn in the more favored.

§ 4. **Persistence of difference between nations.** If both men and wealth interchanged between industries and between

[5] Recall ch. 4, in general, on the nature of monetary demand.

[6] See Vol. I for numerous statements of the effects of varying quantities of agents upon the economy of utilization; e.g., pp. 138, 163, 164, 213, 228, and chs. 34 and 35 entire.

countries with perfect readiness and without any outlay whatever for transportation, these differences would soon disappear, and perfect equilibrium of advantage would everywhere result. In every country, in every occupation, labor and wealth of given quality and amount would receive the same reward. But the interchange of labor and of products between countries is never without friction.

The laborers, enterprisers, and investors in a naturally rich country are thus in a position of more or less enduring advantage relative to those of older and poorer countries. Differences of the same nature appear as between different parts of the same country, as between the Northern and the Southern states of the American union, between the Eastern and the Western states, and even between neighboring countries of the same state. The differences between two countries, however, are likely to be more marked, the circulation of factors being so active within a country that it is allowable to speak broadly of prevailing national rates of wages and of interest. Altho, as Adam Smith said, "a man is of all sorts of luggage the most difficult to be transported," the higher wages in a new country attract constantly from the older lands a portion of their laborers. The higher rate of interest in new countries constantly attracts investments from abroad; yet, despite these forces working toward equalization, the inequality may remain and, through the working of other influences, may even increase in the course of years.

§ 5. **Doctrine of comparative advantages.** It may be that two countries both possess the necessary technical conditions for making both articles that are to be traded for each other. It may even be that the people in one country would be able to make not only one of the two objects of trade, but both of them, more easily and with less sacrifice and effort than the people in the other. If, for example, American labor can produce two bushels of wheat in a day and English labor but one bushel a day; and American labor can produce just as much iron in a day as English labor—or more—the question

always arises: Is it not foolish and wasteful not to produce both the wheat and the iron?

Now, exactly the same case is presented in almost every simple neighborhood trade. The proprietor may be able to keep his books better than does the bookkeeper whom he employs. The merchant may be able to sweep out the store better than the cheap boy does it. The carpenter may be able to raise better vegetables than can the gardener from whom he purchases. Yet the merchant does not turn to sweeping and the carpenter to raising vegetables, because if they did they would have to quit or limit by so much their present better-paying work, and would lose far more than they would gain.

So whenever the people in one country have a greater advantage in one article than in another, relative to another country, the foreigners, like the low-paid man, will be willing to exchange at a ratio that will make it profitable to specialize in the product wherein the greater superiority lies.[7]

But this is always hard doctrine for the popular mind, and particularly for the commercial mind endeavoring to carry on a business that can not be made "to pay" in the face of foreign competition. It is easy to believe that a country ought not to import goods unless it is at an *absolute* disadvantage in their production. It is often declared that as our country can produce any kind of goods "as well" as foreign countries (meaning with as few days' labor), there is a loss on every unit imported. The fundamental principle of trade as applied to such cases shows that not the advantage which one country enjoys over the other as to a single product determines whether it will gain by producing at home, but the

[7] This theory has usually been presented under the name of "the doctrine of comparative costs." The word "costs" is very misleading in this connection because it is now always applied to enterpriser's outlay. It seems best, therefore, to replace it in this phrase by the word "advantages." Of course, it *never* can be true that an article can be

comparative advantages enjoyed in the production of the two articles in question.

As a simple example, suppose that a day's labor in country A will secure two bushels of wheat (2x) and two hundred pounds of iron (2y), whereas in B a day's labor will secure 1x or 2y. Then A's comparative advantage in producing x becomes a reason for A's not trying to produce y. Trade can take place (aside from transportation outlay) at any ratio between $2x = 2x$ (A's minimum) and $2x = 4y$ (B's maximum). Evidently at any rate between these two ratios each party would gain something by the trade, e.g., at $2x = 3y$ A would get 3 instead of 2y by a day's labor, and B would get $1\frac{1}{3}x$ instead of 1x for a day's labor (2x for $1\frac{1}{2}$ day's labor instead of for two days'). If, however, A could produce exactly twice as much of everything as B could, then there could be no motive on either side for trade. But this never happens.

§ 6. **Equation of international exchange.** Foreign trade of course can take place as barter, and in earlier times, particularly, very commonly did so. But in the existing monetary economy nearly all trades are expressed in terms of monetary prices. Both the prices of all the particular objects of international trade and the general levels of prices in any two trading countries come to be pretty definitely interrelated. Changes in the one country at once compel readjustments in the other. To understand in the most general way how this occurs, a knowledge at least of the elementary principles of foreign exchange is required, and to this we may now turn.

Let us begin with the proposition known as the equation of

"profitably" imported when its monetary costs (all things considered) are higher in the exporting than in the importing country. Indeed, the importation of any article is proof conclusive that the importer thinks that the monetary costs of an article would be higher in the importing than in the exporting country. See further, ch. 15, secs. 11 and 13 (note).

international exchange, which is sometimes given thus: the value of the imports of a country must in the long run equal the value of the exports. But this proposition (especially the words imports and exports) must be understood in a much broader sense than that of the movements of merchandise merely. The proposition might better be expressed: the total credits of a nation (including money actually sent abroad) must just equal its total debits (including money imported). Into the balance of accounts between any two nations enter many items: the cash values of the imports and exports of merchandise; freights, insurance premiums, and commissions; the expenses of citizens while traveling abroad; money brought in or taken out by immigrants; the cost of the governmental foreign services (such as the salaries of consuls and of diplomatic representatives); subsidies and war indemnities received from or paid to foreign nations; the investments of foreign capital; and credit items of many kinds, on both sides of the account.

The effect of loans upon the equation differs at different periods according as they are just being made, are continuing, or are being repaid. When foreign capital is first invested in a country, whether it is loaned to the government or to individuals or to corporations, either gold must be remitted to the borrowing country or goods be sent. But later the interest payments and the eventual repayment of the principal of the loan act in the opposite direction. Accruing interest must be offset annually by exports from the debtor country and the repayment of the principal requires that either money or goods be exported equal in value to the original obligations. In popular opinion an excess of exports of merchandise is an index, if not the real cause, of national prosperity; but evidently it is no true index whatever on this point. An excess of exports may at any given moment indicate that the country is rich and is lending abroad, or that it is in debt and is paying interest, or that it is repaying the principal. On the other hand, an excess of imports may in-

dicate either that a country is poor, and is borrowing from abroad, or that it is rich, with many foreign investments, and is receiving the income from them in the form of a regular shipment of goods from the debtors.

The following statistics of the foreign commerce (merchandise imports and exports) of the principal countries of the world are given in significant groupings which call for various explanations.

Figures are in million dollars ($1,000,000) and are mostly for the year 1908. (Stat. Abst. 1908, p. 769). At the present writing the war has altered all the lines of commerce.

COUNTRIES HAVING EXCESS OF IMPORTS OF MERCHANDISE

	Excess %	Imports.	Exports.
United Kingdom	57	2,886	1,835
Germany	20	1,824	1,523
Netherlands	30	1,130	873
France	12	1,089	975
Belgium	33	642	484
Italy	68	562	334
Aust.-Hung.	7	487	457
Switzerland	44	287	200
Spain	10	168	153
Sweden	26	163	129
Denmark	16	191	165
Norway	58	101	64
Canada	34	298	222
China	43	254	178
Turkey	59	135	85

COUNTRIES HAVING EXCESS OF EXPORTS OF MERCHANDISE

	Imports.	Exports.	Excess %
United States.	1,312	1,638	25
Russia	436	542	24
British Colonies	558	615	5
British India	418	486	16
Australasia	242	302	25
Japan	196	206	5
Cuba	84	116	40
Mexico	78	115	42
San Domingo	5	10	100
Argentina	263	353	34
Brazil	172	214	24
Chile	98	116	18
Uruguay	35	37	6
Bolivia	21	24	14
Venezuela	10	15	50

§ 7. **Balance of merchandise movements.** The first group evidently consists of the older, creditor countries which are drawing some of the income of their investments from abroad each year in the form of food and of raw materials of many kinds. The second group includes countries of very diverse conditions, possibly all having some investments abroad; Italy receives large imports in return for the services of many Italians working in foreign countries, and the three Scandinavian countries (especially Norway) carry on a large commerce for other nations which is paid for in these ways. The excess of imports in the third group probably is the result of

new investments that were being made in Canada by English and American capitalists, in Turkey especially by Germans, and in China by Americans and Europeans.

The countries in the second column are doubtless on the whole debtors, but in varying degrees. The excess exports of some are insufficient even to pay all the current interest, and they are borrowing still more (possibly the British colonies, Japan and several South American countries); others have ceased to borrow and are simply paying interest; whereas the United States at least with its excess of exports was at this time both paying interest and getting out of debt. With the outbreak of the war in 1914 the United States began rapidly buying up its foreign-held securities, and events are fast making it a creditor nation. Its imports must therefore in future more nearly equal if not exceed its exports, the actual outcome being dependent as well on various other items in the balance as on those here considered.

§ 8. **Cancelation of foreign indebtedness.** In the international business of any two important countries to-day, such as England and America, the number of credit and debit transactions is enormous. If each trader had to attend to the forwarding of the means of payment for his purchases he would, of course, deduct from the amount of his indebtedness the amount due him from his foreign correspondent, and might from time to time "remit" the balance in the form of a shipment of gold. This simple offsetting and cancelation of debits and credits would greatly limit the amount of gold that would have to be shipped. But still, under such conditions, there must be a very large number of shipments of gold by different individuals, and a large proportion of these shipments would be going in opposite directions at the same time. Now a merchant in New York called M may have a balance to pay in London to X and at the same time a merchant in London called Y have a balance to pay in New York to a man called N. If M can buy from N his claim in the form of an order, draft, or bill of exchange, and

send it to X, the latter may through his bank collect the sum from Y. In this way a further cancelation of indebtedness would occur.

When all persons having either debits or credits to be paid in New York and in London, respectively, are dealing with the banks in these cities, and the banks and special exchange brokers are constantly buying and selling these bills, a market is created for London exchange in New York (and conversely in London), and a much easier and more nearly complete cancelation of indebtedness results. In effect, all the debits and credits between the two countries are merged into one big ledger balance, and the international shipment of gold bullion finally made is just the amount needed to balance the accounts payable at the time. Industrial indebtedness is represented in various forms: bills of lading for goods shipped, drafts made by the creditor on his debtor for goods shipped or property sold, checks or letters of credit for travelers, bonds and notes public and private. These are the objects dealt in by the bankers who are the agents to carry on the work of exchange.

The balance of foreign exchanges is of essentially the same nature as the domestic cancelation of indebtedness. It is going on constantly between the two merchants in the same town, between two banks in the same town who represent groups of merchants, between men in neighboring towns, and between distant states like New York and California.[8] The price of exchange to the individual is reduced by the specializing of the business in the hands of a few dealers, permitting the cancelation of indebtedness or offsetting of exchange, and greatly reducing the amount of bullion to be transported in making the payments. The cost to the bank of providing this exchange for its customers varies as conditions change, but in any case is not great, so that in domestic business when any charge is made it is usually at a fixed rate, and is mainly for the service.

[8] See ch. 7, sec. 7.

§ 9. **Par of exchange.** Foreign exchange from America to Europe is, however, in two features different from domestic exchange: (a) the cost of shipment of gold is greater; (b) the monetary units of the two countries usually differ in name, weight, and fineness, and sometimes in materials. We may define foreign exchange as the purchase and sale of the right to receive a given kind and weight of metal or its monetary equivalent in current funds at a specified time and place. *Par of exchange* between two countries using the same metal as a standard is the number of units of the standard coin of the one country that contains the same amount of fine metal as the standard coin of the other country. There is no fixed par of exchange between gold-using and silver-using countries; par of exchange between them fluctuates with changes in the comparative values of the two metals. The *gold shipping points* for importing or exporting gold are respectively par of exchange plus or minus the cost of moving the actual metal. These points vary with means of transportation and communication. The par of exchange between New York and London being nearly $4.866 and the cost of expressing and insuring a gold pound between New York and London being approximately $.02,[9] the shipping point for the export of gold from New York is $4.886 and for the import of gold to New York is $4.846. At these upper and lower limits, there is a motive for shipping gold as a commodity.

When large sales have been made to Europe and credits are accumulating in New York and the importation of gold is imminent or already begun, the claims are bought by bankers in New York at less than par. At such a time one needing to remit a sum to London can buy exchange for less than par, for every such draft remitted reduces London's indebtedness and, by so much, the need of shipping gold to this country. As a rule then, accumulating credits here mean a low

[9] This varies also with conditions; after the outbreak of the war in 1914 it was for a time as high as $.05 because of high war rates of insurance.

rate of exchange, accumulating debits a high rate of exchange from this to the foreign country.

These are the merest rudiments of the subject. The many problems arising, such as the adjustment of foreign credits to changing needs, and such as arbitrage (the readjustment of the rates of exchange prevailing among different financial centers) make foreign exchange both a complex science and a difficult art.

§ 10. **International monetary balance and price-levels.** The balance of all accounts for or against a country (including new loans, current interest, and repayments) must thus eventually be settled in money. This cannot fail to affect the general level of prices in both countries, tho this is brought about often only in indirect and gradual ways. The flow of money out of a country causes the loan market of a country to tighten (interest and discount rates to rise) in proportion as the reserves of the banks are reduced. Then "general prices" begin to fall.[10] When prices fall, imports decline, as the country is not so good a place in which to sell: when prices rise, imports increase, as it is a better place in which to sell. The opposite effect is produced on exports, and thus in a short time the national credits and debits are again brought into equilibrium. A slight movement of money in either direction is enough to influence prices and set in motion forces to counteract a further flow of money. Decade after decade the circulating medium of leading countries changes very slightly in amount, and the fluctuations in its amounts during periods of so-called "favorable balance of

[10] The connection between a high rate of interest and falling prices is a dynamic phenomenon of a very temporary nature. In long-time static conditions the general level of prices and the prevailing rate of interest are dependent on entirely different sets of forces. See on the theory of interest, Vol. I, p. 308. In long-time movements of prices, in contrast with brief changes due to foreign trade such as are referred to above, high rates of interest are connected with rising prices, and *vice versa*. See above, ch. 6, sec. 8, on fluctuating price-levels and the interest rate.

trade'' and of ''unfavorable balance of trade'' are only the smallest fraction of the value of goods passing through the ports of the country.

It is therefore absurd to imagine, as is sometimes done, that a country could, by continually importing goods, be drained of all its money, or that by any possible set of devices it could forever have an excess of exports to be paid for by a continual inflow of gold. Long before either of such movements could go far, the automatic readjustment of prices would inevitably check it, and secure and retain for each country its due portion of the money.

CHAPTER 14

THE POLICY OF A PROTECTIVE TARIFF

§ 1. Military and political motives for interference with trade. § 2. Revenue and protective tariffs. § 3. Growth of a protective system. § 4. The infant-industry argument. § 5. The home-market argument. § 6. The "two-profits" argument. § 7. The balance-of-trade argument. § 8. The claim that protection raises wages. § 9. Tariffs and unemployment. § 10. Exports and exhaustion of the soil. § 11. Protection as a monopoly measure. § 12. Harm of sudden tariff reductions.

§ 1. **Military and political motives for interference with trade.** The considerations set forth in the last chapter raise a strong presumption in favor of the sovereign state permitting its citizens to trade freely across its boundaries, as the best way to further their own prosperity and, on the whole and in the long run, that of the nation. Indeed, this presumption and belief has been held by nearly all serious students of the question, with more or less of modifications and qualifications, ever since Adam Smith published his work on the "Wealth of Nations" in 1776.[1] But in conflict with this belief has been the all but unanimous policy of nations from early times, throughout the Middle Ages, and down to this day, of interposing some special hindrances (of varying degrees and kinds) to this kind of trade. Sometimes this has been done by prohibitions, but more often by taxes imposed upon either imports or exports. Sometimes the attempt is made to justify the policy of governmental interference with foreign trade by arguments which crumble before the slightest examination, and again it is admitted that free trade is true in theory, but it is declared to be false in practice. The

[1] See above, ch. 2, secs. 12, 13.

latter view is not to be entertained for a moment. If free trade in theory (as an explanation) is complete and true, it will in practice (as a plan of action) be sound and workable. In truth, however, the practical policy of governmental interference with foreign trade has always in part rested on other than the simple economic grounds.

Interference with free trade with the foreigner has always been in large measure due to political motives. In every petty medieval state or self-governing city, the aim was to make the economic boundaries coincide as nearly as possible with the political boundaries. Except for the trade in a few articles of comparative luxury this aim was at that time nearly attainable. The peasantry surrounding a fortified town and enjoying its protection were compelled to trade there. Down to our own time it has seemed to statesmen expedient to forbid or discourage trade that might nourish the economic power of future enemies. Sometimes governments have used embargoes, bounties, or tariffs as weapons to injure the trade of other nations and to secure diplomatic or commercial concessions. Often they have sought by tariffs to encourage the building of ships and the manufacture of armaments and of all kinds of munitions by private enterprise within their own borders, even when the immediate cost of these products was greater than if they were purchased abroad. In such cases it is always a question whether an outright expenditure would not be better, whether the government could not build its own arsenals and shipyards more economically than it can foster private enterprise by means of a protective tariff. However, the political (or military) argument for protection recognizes that it is in itself a costly (not a profitable) policy, and that the cost is only justified on the grounds that military necessity warrants the outlay.

The military argument as applied to the preparation of ships and munitions has no application to a tariff on those articles which have no bearing upon military power. But the most recent application of science and the mechanical arts

to the uses of war has given new significance to a larger policy of industrial preparedness for military purposes. The year 1914 doubtless ushered in for the world a new epoch of protective and discriminatory tariff legislation determined by political rather than by direct economic considerations.

§ 2. **Revenue and protective tariffs.** An important distinction in principle is to be made between a tariff for revenue and a tariff for protection. A *revenue tariff* is a schedule of duties on goods entering or leaving a country, so arranged that the collection of taxes causes the least possible disturbance to domestic industry. Speaking generally, the duties may be on either imports or exports; but, as export duties are unconstitutional in the United States, our tariff discussions are concerned only with import duties. The most completely revenue-yielding tariff is one touching only articles which, even at the higher prices, are not in the least to be produced profitably in the home country. A *protective tariff* is a schedule of import duties so arranged as to give appreciably higher prices to some domestic enterprises than they could obtain with free trade. It shuts out some foreign goods which would otherwise enter, and in so far it "protects" the domestic producer from the foreign competitors who would sell at lower prices than those at which he can or will sell. In other words, "protection" means governmental interference with the freedom of trade.

The distinction between revenue and protective tariffs, thus clear in principle, is not always easy to make in practice. It does not lie in the intention of the taxing power, but in the actual effects produced. Most tariffs combine the characteristics both of revenue and of protective measures. A tariff that reduces imports but does not cut them off entirely may be called either a revenue tariff with incidental protection or a protective tariff with incidental revenue. The difference is one of degree. But notice particularly that the two features of protection and of revenue are mutually exclusive. To the extent that one is present the other is impos-

sible. A tariff rate that in whole or in part excludes the foreign article to that extent affords "protection" but does not yield revenue. Whenever the government collects a cent of tariff taxes, the domestic producer in so far and as respects that unit of goods is unprotected. Likewise, whenever any domestic producer enjoys "protection" in respect to any unit of goods, importation is in so far prohibited and the government is deprived of any revenue whatever derived from the production and sale of that unit of goods.

§ 3. **Growth of a protective system.** The protective policy developed at first accidentally, as it were, out of the practice of levying taxes for revenue only. Tolls, dues (or duties), customs (that is, in former times the customary dues paid by merchants, now the dues fixed by law), tariffs (that is, schedules or lists of rates of duties) were at first intended to raise revenues for the sovereign, the city, or the state. The unintended, and to some degree inevitable, result of the taxation of goods in commerce, whether imports or exports, is to prevent and discourage trade and to raise the prices of the goods imported. Any change in tariff duties, therefore, at once alters the previously existing adjustment of profits and of industries in a country.

The first effect of the tariff is the same as that of any new factor in enterpriser's cost; the same, for example, as that of a new domestic tax on an article or as that of a rise of freight rates—the domestic price of the taxed article tends to rise. Other results then follow. If the article cannot, even at the higher price, be produced within the country (as in the cases of oranges, spices, and coffee in England, Norway, and Sweden), its consumption is reduced. The lessening of demand may, however, depress somewhat the price in the producing country. But as such a tariff does not increase home production of the taxed article, it is therefore for revenue, not for protection.

But if the article can be profitably produced in the importing country at the new price, "home industries" will start.

Where the transportation charges are low, as on the coasts and on the main lines of railways, some imported goods may be bought, while farther inland where transportation charges are higher home production of some or all grades of such goods may take place. If the whole demand at home is supplied and all imports stop, therewith cease all revenues to the government from that source. A completely protective tariff is completely prohibitive.

Experience abundantly shows that, with a few exceptions, due to climate and natural resources, it is impossible to put into effect the most moderate schedule of duties without the increase in price at once causing some men to shift their occupations, and to begin producing articles of the kinds that have risen in price. At once appears a group of "protected industries," the owners of which are dependent for the safety and profits of their investments, and the workmen in which are dependent for the security of their present jobs (possibly for the chance to continue the pursuit of highly skilled trades) on the continuance, if not the increase, of the existing tariff rates. A tariff may be adopted mainly from stress of financial need (as in our own history in 1789 or in 1861), but its modification or repeal cannot be decided by fiscal considerations. The "incidental protection" it affords has created a wealthy and influential group of employers and a large body of employees who are irresistibly tempted to exercise their influence in politics almost solely in favor of continuing and of increasing the rates to the sacrifice of the higher civic life of their communities. Of course the beneficiaries of the tariff usually believe sincerely that it is indispensable for the prosperity of the country as a whole, and they can do much to persuade others to the same opinion. This commercial motive for maintaining existing protective tariffs explains in large part their wide prevalence, whatever other reasons may be adduced in their justification.

§ 4. **The infant-industry argument.** Most free-trade writers concede a limited validity to the claim that protection

may be used to encourage infant industries and thus diversify the industries of the country. If the natural resources of a land are adapted to an industry, it may be called into being earlier by a fostering protective tariff. This is merely anticipating and hastening the natural order of progress. In the American colonies the manufactures of such goods as iron, cloth, hats, ships, and furniture sprang up and continued not only without "protection," but despite numerous harassing trade restrictions made in the interest of English merchants. Can it be doubted that many of these industries would have developed and flourished after the adoption of the Constitution with no other favoring influences than those of rich resources and of economy in freights? In the Mississippi Valley since 1880 natural gas, abundant coal, ore, and timber have made possible a great growth of industries without protection against the Eastern states. Industries capable of eventual self-support must in most cases naturally appear in due time. Economic forces will bring them out. The protective system has often been likened to a hothouse, anticipating the season by a few weeks and at great cost. The question is whether the mere possession of the hothouse is a luxury worth the price, if meantime the products can be got more cheaply by trade. English manufactures flourished in the nineteenth century because they were well established, had excellent coal supplies, great stores of iron ore, and low-paid labor which did not have the opportunity of better alternatives, as did the American workman. If America had imported more (it would not have been all) of her iron and coal, the English mines would have begun to shown signs of exhaustion earlier, and America's advantage surely would have asserted itself in time. Her iron manufactures undoubtedly were hastened—they cannot truly be said to have been created—by the protective tariff.

The peculiar advantages of a new country attract labor and enterprise into a few lines. Industries are forced into an earlier diversification by tariffs. Which is the better eco-

nomic situation? Contrast Iowa, Dakota, and Minnesota, or Kansas, if you please, with New York and Pennsylvania. Is it so certain that a dense population congested in cities and crowded in factories and mines is a more ideal social aggregation than is a community of prosperous farmers? The smoky industrialism fostered by protection often puts a premium on a low grade of immigrants, crowds then into city slums and into forlorn mill towns, and keeps them aliens to the American spirit. It would be surprising if Americanism on the Western plains were not as sound as in the crowded cities. But the infant-industry argument appeals strongly to the enterprise and the speculative spirit of Americans, who like to do all things rapidly and on a large scale. Every village aspires to be a great industrial center. Americans are impatient of the suggestion that things "will come in time"; they like things to come at once.

It must, however, be recognized that in a new country there is often a certain monotony and poverty of life because of the lack of diversified industries. There are not sufficiently varied avenues for the expression and use of the manifold talents of the nation. There are unused materials and opportunities, but the initial expense of experimentation, the initial difficulties of gathering and training a working force, are discouraging to individual enterprise, prices being as they are. A protective tariff is not necessarily and always the best way, but it is one way of helping private enterprise to establish and conduct such industries through their initial period. But as has been pointed out by many writers, the infant-industry argument is self-limiting, and involves always the assumption that the industries selected as fit for protection are such as ultimately, and within a moderately short period, can grow into self-dependence. The infant must sometime grow to be a man and stand on his own legs, or he is either a chronic invalid or a degenerate.

§ 5. **The home-market argument.** The home-market argument seeks to show a more permanent need for a tariff. At

the same time it appeals to the farmers, whom it has been hard to reconcile to a policy which in America [2] has been peculiarly favorable to manufacturers. The home-market argument extols the advantages of having near to the farms customers for agricultural products, and dwells on the greater steadiness of domestic trade. War or political changes, it is said, may change the demand for products. This is true, but no other changes have affected American agriculture so radically as the peaceful development of domestic transportation and the opening of the West.

The main economic claim made in the home-market argument is that the shipping of food to Europe and the importing of manufactures involve a great cost for double freights which could be saved by manufacturing at home. The farmer is supposed to pay this cost. The obvious defects in this view are: first, there is nothing to show that the freight is not partly or entirely paid by the European, either the manufacturer or the food consumer; secondly, home trade "saves the freights" for the farmer only in case he can buy goods under a tariff with less of his own labor and products than under free trade. The payment of freight charges is true economy when the goods can be bought at a distance on more favorable terms than near home. The freight argument attempts to prove too much for it condemns every trade within the country, of goods produced a stone's throw away from the consumer.

The home-market appeal is strongest when addressed not to all farmers, but to one class of farmers, those whose lands are situated nearer the manufacturing cities. As city population grows, some land is converted from the extensive cultivation of corn and wheat to dairying, fruit- and market-garden-

[2] In European countries, on the contrary, the rates that have been mainly effective have been those levied upon food products, and the agricultural landholders have been the "protected interests," such as the England "landed aristocracy," the German agrarian "Junkertum," and the French peasant landowners.

ing in the neighborhood of cities, and perhaps at length is used for factory sites or as city lots. There is, thus, a partial validity in the argument as applied to a comparatively small number of farmers, who gain as landlords, not as tillers of the soil. Even greater gains have sometimes been reaped by the owners of timber lands, ore mines, coal lands, and other natural resources, the values of which have been raised by tariff legislation. But unless these gains come from truly productive additions due to the tariff, there is no benefit to the community as a whole.

§ 6. **The "two-profits" argument.** Somewhat related to this idea of the saving of two freights is the "two-profits" argument. It is said that the tariff keeps "two profits" at home, foreign trade gives but one. The word "profits" is here used in the popular sense of gain from a single transaction. Both parties are said to profit and both profits are thought to be secured at home when two citizens are forced to trade with each other. The view that there are "two profits" in a trade is an advance upon the notion that "one man's gain is another's loss,"[3] but there is an error in elementary arithmetic here, both as to the number and as to the aggregate amount of profits. The purpose of a protective tariff is to compel two of the citizens of a country to trade with each other instead of trading with two citizens of a foreign state; the number of profits made by each country is therefore not increased by substituting domestic for foreign trade.

What, then, as to individual size and aggregate amount of the profits? The gain is not the same in all trades; the trade is made if there is a gain to each party, no matter how small it is; but the generous "profit" on one transaction where the conditions of the two parties are very different may be greater than the total of petty gains on a dozen trades between two traders of evenly matched powers. Indeed, the greater the difference in the conditions and the capacities of two groups

[3] See above, ch. 13, sec. 2.

of traders, the greater is the sum of the profits which they may secure through the members of each group trading with those of the other, rather than by the members of each group trading only among themselves. Can it safely be assumed that every trade with a foreigner is less advantageous than one with a fellow-citizen? Diamond cuts diamond, but two Yankees left to themselves surely should not be worsted in bargains with the universe. If they could exchange to better advantage with each other they probably would discover it as soon as the interested manufacturers and political orators who can prove so eloquently that they know the other man's business better than he knows it himself. Forcing the home trade by making our citizens trade with each other whether both wish to or not may be to the advantage of one citizen, but it is not likely to be to the advantage of both citizens.

§ 7. **The balance-of-trade argument.** At the foundation of nearly all belief in the virtues of a protective tariff will be found the "favorable balance-of-trade" notion. The ideal of the more thorogoing upholders of a protective policy is to keep merchandise consistently flowing out of the country, and to have nothing come in—in any case, nothing that by any fair amount of effort (whatever that be) could be produced at home. This is called maintaining a "favorable balance of trade." Sometimes the emphasis is more on the advantages of an excess of exports of goods, sometimes more on the importance of the need "to keep money at home." The simple error in these opinions is clearly apparent in the explanation of foreign exchanges and of the principles regulating the international flow of money.[4]

An interesting commentary on the opinion before us is the fact already noted[5] that an excess of exports is the usual situation in poor debtor countries having constant interest payments to meet; while, on the contrary, rich creditor countries have an excess of merchandise imports.

[4] See ch. 4, sec. 6 and ch. 13, secs. 6–10.

[5] In ch. 13, sec. 7.

The "favorable balance-of-trade" argument, with the emphasis on money rather than on goods, is that the protective tariff keeps money at home which, if trade is free, will be sent abroad to buy foreign goods, thus impoverishing the country. This doctrine as presented in the seventeenth and eighteenth centuries in Europe, was known as *mercantilism*. It had great influence upon the commercial policies of all the great European nations. A superficial glance at the trade relations of an old, rich country with a new province seems to give evidence for such a belief. A richer country that is lending capital (sent to the debtor country in the form of goods) has at the same time a larger supply of money. The lack of money and the poverty of the newer country are looked upon by the protectionist as due to the importation of goods. The common cause of the imports to newly settled districts and of their scanty stocks of money, it need hardly be repeated here, is the comparative poverty of settlers and pioneers.[6] Often these are paying for imports by means of loans, and in any case their monetary stocks are not decreased either by their foreign trade or by their domestic trade with the older and richer parts of the same country. Europe and the United States, in their trade with China and South America, usually do not get gold in exchange, but merchandise of various sorts. It is true that in the trade of England and New York with great gold-producing districts, such as California, South Africa, and Alaska, gold is received in return for merchandise, for much of the gold in gold-producing districts is merely merchandise, and its export does not drain them of their due portion of money. There was a time when the states of Kansas, Nebraska, Iowa, and their neighbors were filled with resentment against the money-lenders of the Eastern states. There was a widespread belief that hard times were due to an insufficient currency.[7]

[6] See ch. 4, secs. 4 and 9.

[7] That there is a certain measure of truth in this opinion is recognized in our discussion of the standard of deferred payments, ch. 6, sec. 9.

Attempted action took the form of the greenback and free silver movements, which were defeated by the opposition of the East, but there can be little doubt that if the Federal Constitution had not forbidden it, the discontented states would have established a protective tariff "to keep their money at home." Few advocates of protective tariffs are ready to admit that the money stock of the country is dependent on the general wealth of the country and on the methods of doing business, rather than on a protective tariff.

§ 8. **The claim that protection raises wages.** The most effective popular claim made for protection is that it raises, or maintains, the general scale of wages in the country. This argument takes two forms: first, when wages are low in a country it is claimed that a tariff is needed to raise them; and, secondly, when wages are high it is argued that a tariff alone can preserve them. In Germany the fear is of the higher paid and more efficient labor of England. In America, where general wages at all times have been higher than in England, it was first argued (in the time of Henry Clay) that because of the greater cost of production, due to high wages, the tariff was needed to start certain industries; but after the tariff had long been established and the old argument had been forgotten (ever since 1865), it has been urged that the tariff, being the cause of high wages, must be maintained to protect against the "pauper" labor of the older countries. The higher wages in new countries where a tariff exists are always claimed to be the fruits of a protective policy. The true cause of the high general scale of wages in America is the greater efficiency of industry under existing conditions.[8] Labor is surrounded here with advantages in the forms of rich natural resources and of mechanical appliances such as

But the relation of a world-wide appreciation of the standard money commodity with the burden that this change puts upon debtors has nothing to do with the question now before us, viz.: Does a protective tariff enable a country to keep and increase its proportion of the world's stock of gold; and if it could, would it be a general benefit?

[8] See Vol. I, especially p. 228, and chs. 34 and 36.

never before were combined. Because of the scarcity of workers in particular protected industries, wages may be temporarily higher in them than in some other industries; but such workers form a small fraction of the population, and it is impossible to show that the general scale of wages in all occupations is raised by the tariff protecting this fraction.

There is, of course, no question that every tariff change affects certain enterprises and classes of workmen. Enterprisers already acquainted with and engaged in a business always may hope to gain by the higher prices immediately following a rise in the tariff rates on their particular products. Though they are granted no enduring monopoly by the protection, they for a time enjoy the advantage of being on the ground, and may reap the first fruits of the favoring conditions. The enterpriser usually profits when the price of his product suddenly rises. Usually skilled workmen are affected slowly by competition when there is any considerable increase of prices in their special industries. The important question is, Who bears the burden of the higher prices that result from a tariff? The burden is very soon distributed. A part of it may be for a short time borne by the retail merchants, but ultimately nearly the whole of it must be borne by their customers, the unfortunate, less favored citizens. The weight falling on each is usually small, often unsuspected, always hard to measure. The increased benefit is concentrated in a few industries and accrues to a comparatively few producers. Here is a recipe for riches: get everybody to give you a penny; it 's so little that no one will miss it, and it will mean a great deal to you. Something like this happens in the case of many protected industries; every consumer of the article pays a few cents more, a small group of wage-earners temporarily gains, and a few enterprises wax wealthy.

§ 9. **Tariffs and unemployment.** The claim that a low tariff is bad for the workers is made with peculiar success in any period when unemployment is greater than usual. It is vain in reply to show that again and again equally bad

periods of unemployment have occurred when a high tariff was in force, and that often the most highly protected industries are most affected. It is vain to suggest that fluctuations of unemployment are related rather to the rhythm of industrial cycles and panics, than to any particular level of the tariff, whatever it be.[9] The fact that at the moment is seen is that here are some men for the time out of work, and here are some foreign goods coming in. Of course, what is not seen is that if we stop importing goods we thereby eventually will stop the exportation of goods of equal value now being sent in payment and this must throw as many men out of jobs as we helped into jobs by raising the tariff. But the view easy to take is the short view, and the ulterior consequences seem to the popular mind to be vain imaginings.

§ 10. **Exports and exhaustion of the soil.** It has been ingeniously argued that a tariff may keep some of the natural agricultural resources of a new country from becoming quickly exhausted. The export of food takes out of the soil and out of the country fertile qualities never to be returned. The shipment of several hundred million dollars of food products year after year represented a tremendous drain from the soil of the United States, but this has now largely ceased. The assumption, however, that the use of the food in this country preserves the fertility of our own fields is in the main mistaken. The fertile material in the food for human consumption hauled to a town five miles away from the field is almost as entirely lost as if it were shipped to Europe. Engineering skill has as yet succeeded in returning economically to the fields from which it comes hardly a fraction as much fertile organic matter as that which flows into the sewers, that is dumped into river and ocean, and that is buried in heaps at the borders of our own cities. Artificial fertilizers are increasingly used, to be sure, but they are obtained in other ways. On the other hand, the increased use of iron,

[9] See on wages in times of crises, ch. 10, secs. 6 and 7; and on tariff changes, ch. 10, sec. 14, and ch. 15, sec. 13.

coal, and timber, as a result of encouraging manufacturers, has very effectually hastened the exhaustion of the natural resources of the country.

§ 11. **Protection as a monopoly measure.** It has rightly been observed that a new country has a limited potential monopoly in certain kinds of products and that a tariff may make it effective. The rapid opening up of America with its rich natural resources greatly benefited the average consumer in Western Europe, altho it caused a loss to a special class of landowners.[10] Whether the citizens of the older or of the newer country shall reap the greater benefit in the trade depends on the reciprocal demand for the two classes of goods, as was seen in discussing the equation of international demand. A wide margin of advantage may go to one party and a narrow margin to the citizen of the more favored land. To put it concretely: America, having great natural resources for agriculture, might continue to trade food for manufactured goods even tho England reaped most of the benefits of the trade. An American tariff on manufactures from England would, under such conditions, check the demand for English products and compel some Americans to leave farming. This reduction of the American supply of wheat or corn and of the American demand for English manufactures compels a new ratio of trade (expressed in prices). It is conceivable that trading fewer goods with a larger gain on each trade would give a larger total of gain to the favored nation. Thus, foreigners may conceivably be compelled to pay a part of the tariff duties to enjoy the favored market. This is but a special case of the monopoly principle; the government by law artificially limits the supply of goods offered by its citizens.

This argument is somewhat subtle, but probably is the soundest one in the theory of protection. The supposed conditions seldom occur in a marked measure, but they may exist, and probably have existed in America. When the great

[10] See Vol. I, pp. 361 and 443.

system of internal transportation was developed in the United States before that of the other new countries (say from 1840 to 1894), this country had such peculiar advantages for the production of food that the quantity was enormously increased and agricultural prices fell.[11] At such a time the tariff may have worked toward checking the fall and earlier reëstablishing a more favorable ratio. It did this by making prices of manufactured goods in this country artificially higher and thus tempting men from rural to urban callings. But the limited application of the principle must be recognized. The potential competition of undeveloped countries on all sides, seeking to develop their resources, and profiting by the higher prices of food in the world-market caused by our tariff, threatens the peculiar advantages of the favored land. Russia, Argentine, and Australia have rapidly taken the place of America in supplying food to Western Europe, in part, no doubt, because we refused to take Europe's goods in trade. A great nation with its manifold interests is not eminently fitted to practise the gentle art of monopoly.

The period in America from about 1840 to 1890 shows certain absurd contradictions in economic policy. By governmental action, national, state, and municipal, enormous grants of money and lands were made in aid of transportation. Canals, roads, and railways were built into new agricultural territory far faster than was healthy and normal. A prodigal land policy put a premium upon a wastefully rapid extension of the farming area. These things were done to favor the agricultural states, but agricultural prices fell so greatly that our farmers for a long period were nowhere prosperous, and great numbers of them, both in the East and in the West, were ruined. At the same time a high tariff on nearly everything the farmers needed to buy was the political spoil obtained by the Eastern and Middle states. This further depressed the condition of the farmers and forced them or their

[11] See Vol. I, p. 436, for average wheat prices in England, practically in the world-market.

sons into urban industries. A slower development would have occurred without the waste of national resources in such conflicting policies of artificial stimulation.

§ 12. **Harm of sudden tariff reductions.** It is rarely appreciated how great is the tactical advantage which the advocates of a high tariff enjoy in popular political discussion. They can so easily impress the popular judgment with the evident fruits of their own policy and with the immediate dangers of the policy of their opponents. When a protective rate is first applied or is increased, it calls into existence something visible and tangible, which can be measured in terms of factories built, men employed, and products turned out. The increased cost of these results is diffused among many consumers and reaches them in such indirect ways and in such small increments of price that they are quite unaware of the way they are affected.[12]

On the other hand, reduction of the tariff works in a direction the reverse of its enactment. It may cause local crises and may even bring on a general crisis. The benefits of the lower prices are diffused and lost to view; the immediate injury is concentrated and strikingly evident. Factories are closed, investments depreciate, laborers are thrown out of employment. The organic nature of local industry causes these evils to be felt by many classes. Merchants, professional men, servants, and skilled laborers, that are tributary to the depressed industry, suffer. The effects are transmitted to commercial and financial centers and often credit is much shaken. Then follows a slow and painful process of readjustment.

The low-tariff advocates in America undoubtedly have underestimated these immediate effects. They have been too abstractly doctrinaire, have argued too absolutely for the merits of free trade to be applied instantly regardless of the existing distribution of investments and of occupations. They have opposed one extreme system by another, with no thought of the inexpediency and injustice of sweeping changes. There

[12] See above, sec. 8. On the next paragraph, see ch. 10, sec. 14.

is a strong feeling among business men that any tariff, be it high or low, is better than a shifting policy. Despite the great preponderance of domestic production over foreign trade, it is perhaps too much to say that the tariff is unimportant in our present conditions. It can, however, be truly said that business can adjust itself in large measure to any settled conditions and that radical changes, especially sudden and large reductions, are fraught with evils. Long before a new tariff law goes into effect, even months in advance of its passage, while it is merely in prospect, the course of trade is abnormally affected. If the rate is likely to be raised, large importations take place under the lower rate, and for a considerable time after the law goes into effect imports are small, while prices rise and domestic production gradually increases. But if the rate is likely to fall, importations are for months meager, stocks of goods are reduced to the lowest point, and when the lower rate goes into effect, large importations follow to the injury of domestic producers. In many cases a year or two of notice, time given to enterprisers to adjust their business, would probably do away with a large part both of the serious losses and of the lottery-like gains that otherwise occur.

The obvious measure of precaution and of justice would be to put any new rate into effect gradually.[13] The difficulties are of a political nature and in the desire of the party in power to "make a showing" at once of the results of its campaign pledges, in the one case by starting and stimulating industries through a higher tariff and in the other by reducing

[13] For example, the maximum alteration in any year might be limited to 3.65 per cent of the value of the goods and in any case not to exceed one tenth of the old duty, this change to be applied day by day. Thus, if, on a valuation of $1000, the duty collected under the old rate has been $400, and under the new law is to be $290.50, three years would be required for the full change to become effective, the reduction each day being $.10 per $1000 valuation. The administration of such a rule would be simple, and it has been favored by men of practical commercial experience.

prices to consumers through a lower tariff. Under the new permanent tariff board, constituted to suggest tariff changes and to administer the tariff laws, it would be possible to apply some such feature.

CHAPTER 15

AMERICAN TARIFF HISTORY

§ 1. Prevalence of protective tariffs. § 2. Specific and *ad valorem* rates. § 3. Some technical features of the tariff. § 4. The tariff, 1789–1815. § 5. The tariff, 1816–1845. § 6. The tariff, 1846–1860. § 7. The tariff, 1861–1871. § 8. The tariff, 1872–1889. § 9. The tariff, 1890–1896. § 10. The Dingley tariff, 1897–1909. § 11. Sentiment favoring lower rates. § 12. The Payne-Aldrich tariff, 1909–1913. § 13. The Underwood tariff, 1913. § 14. Some lessons from our tariff history. Note on Tariff legislation and business depressions.

§ 1. **Prevalence of protective tariffs.** For a century and a half most serious students of economics have favored a larger measure of freedom, if not absolute freedom, in foreign trade. But the actual practice of most nations has never been in accord with the principles laid down by the philosophers. Great Britain alone among the larger countries has, since 1846, steadily pursued a low tariff policy for revenue only, and her example has been most nearly followed by Holland and Denmark. Germany, which had always had restrictive duties, adopted still more protective measures under Bismarck in 1879. France, Italy, and most of the other nations of Europe have strong protective tariffs. The United States has followed a restrictive policy since near the beginning of the last century. The explanation of this contradiction between precept and practice is not entirely simple. Great interests are affected by foreign trade and certain of these interests are able to influence opinion and to dominate legislation. Free trade is not the most desirable thing for every one. The general policy of free trade between nations, as advocated by most English economists since Adam Smith,

has usually been rejected by the people and the legislators of other countries.

In its details American policy in tariff legislation under the Constitution has been varied and vacillating. The changes have been determined in most cases by motives of temporary partisan advantage or by the political activity of the immediate beneficiaries rather than by clear knowledge and consistent purpose of the electorate as a whole. Thus its lessons for the student are largely of a negative nature, but they well repay serious study.

§ 2. **Specific and *ad valorem* rates.** Before entering upon the history of the American policy let us make clear the meaning of certain technical terms and explain certain methods which are frequently referred to.

Rates (and duties) may be by either specific or *ad valorem*. *Specific duties* are those that are calculated and levied according to some physical test, as so much per pound, per yard, per hundred-weight, or per ton. *Ad valorem* duties are those that are calculated and levied according to the value of the goods (usually as it was at the place of shipment) determined by an assessor, by invoice of sale, by statement of the importer under oath, etc. The actual duty collected on any article may result from various combinations of the two rates (as, to take an actual example, $4.50 a pound and 25 per cent *ad valorem* on cigars and cigarettes) or *ad valorem* with a minimum valuation so that on the cheaper goods the rate is specific.

Specific rates are more easily applied in administration, not offering the temptation to undervaluation and misrepresentation that *ad valorem* rates do; on the other hand, specific rates do not adjust themselves to price changes as *ad valorem* rates do. If the prices of goods go up the specific rate is relatively less and affords less of "protection" to the domestic producer; whereas if prices go down (as, in general trend, the prices of manufactured goods have done most of the time) the specific duties are relatively greater. To take a historical

example, the specific rate of 6¼ cents a yard on cotton goods in 1816 which was at first in fact only about 25 per cent, within a few years became about 75 per cent and absolutely prohibitive. For this reason specific rates have most often been used in acts intended to increase the "protective" duties and often as a device for immediately raising rates; while *ad valorem* rates have been more often used in acts prompted by the desire for less drastic exclusion and for a more adequate revenue; but there is no essential connection between the protective policy and specific rates. Indeed, in the period from 1897 to 1909, when most prices were rising, many of the specific rates under the Dingley Act, intended to be strongly protective, afforded less and less "protection."[1]

§ 3. **Some technical features of the tariff.** All goods not subject to duties are said to be on the *free list*. It is custom-

[1] It is evident that it is only through *ad valorem* rates that it is possible to compare the average rate of duty for one tariff act, with that for another. As, however, every tariff act is made up of both specific and *ad valorem* duties, it is only at the end of the year that an average *ad valorem* rate can be estimated by comparing the total of duties collected with the total estimated value of the goods imported. Average *ad valorem* rates are estimated in this way both on the dutiable goods alone, and on all goods, free and dutiable combined. There may be an element of error, even of misrepresentation, in such estimates. They do not give the simple test of the relative height of duties, or of the degree of "protection" that we might at first suppose. Just to the extent that a new and higher rate really operates to exclude imports (and thus is protective in its effect) the goods subject to that rate cease to form part of the total imports. For example, if the average rate of duty were 25 per cent, and a 50 per cent rate on an article were increased to 75 per cent, it is possible that this rate would prove to be absolutely prohibitive. This raise of rate, therefore, would tend to reduce the average rates collected on all dutiable articles. Changes in general conditions of industry from causes quite apart from the tariff may result in shifting the proportions of imports that are dutiable so that the average rates go either up or down while the tariff law has remained unchanged on the statute book. A failure to consider these and related facts leads to much confusion in popular and political discussion of the tariff.

ary to group articles in *schedules*, of which there are fourteen in the law of 1913, designated from A to N (for chemicals, pottery, metals, wood, etc.), but the rates are not uniform for all the articles in each schedule. *Drawbacks* are a certain amount, the whole or a part, of the duties that have been paid on imported commodities, which is paid back by the government on the reëxportation of the goods. *Compensatory duties* (or compensatory rates) are those levied on certain manufactured articles with the purpose of raising their price as much as domestic producers' costs are raised by a tariff on their raw materials. Examples are a duty on woolen goods to offset a duty on wool, or a duty on shoes to offset one on hides. They may be intended to be partial or complete or more than sufficient, and are likely in any case to work either more or less to the advantage of the domestic producer than was intended. It may be that the conditions of supply are such that the home price of the raw materials is raised little or none by the tariff while the price of the finished product is considerably raised, or *vice versa*.

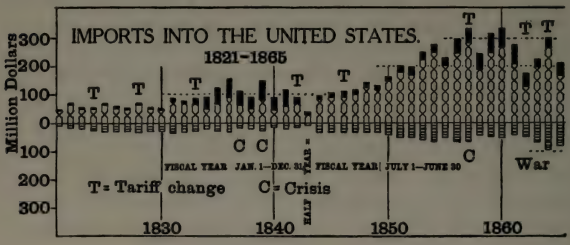
§ 4. **The tariff, 1789–1815.** The main difficulty of government in 1781–1789 under the Articles of Confederation was lack of the power to obtain revenues by taxation. The separate states alone could levy duties, and a good many tariff restrictions on freedom of trade among them developed in this period. The Constitution established the principle of entire freedom of trade among the states. The first act of Congress under the Constitution levied a tariff, primarily for revenue purposes, but clearly having a protective purpose, in the view of some of the representatives. However, most of the separate rates, as well as the general average rate, were the lowest ever levied by Congress, except that there was no free list and that 5 per cent was imposed upon all goods not otherwise enumerated. *Ad valorem* duties up to a maximum of 15 per cent (that on carriages) were laid upon certain articles of luxury, and low specific duties on a few articles such as glass, nails, iron manufactures, hemp, and cordage.

From 1789 until 1812, thirteen tariff laws, all told, were passed. One after another many rates were raised to get larger revenues, but some goods were put upon the free list. The foreign trade, in both imports and exports, grew largely and with considerable regularity, rising then rapidly to a maximum in 1807. Then followed troublous times, with British Orders in Council and our embargo and nonintercourse acts until 1812, and war until 1815, trade falling off at first to one-half, and at last (in 1814) to less than one-twelfth of the former maximum. Just as trade was, in the war period, sinking to the vanishing point, the tariff rates were doubled in hopes of getting increased revenues needed for the war, but in vain.

§ 5. **The tariff, 1816–1845.** Tho rates had been rising, manufacturers had been making efforts to secure higher rates for protection, even as early as 1803. Effectual exclusion of foreign goods and consequent stimulus to the establishment of manufactures in the eastern states resulted, in the period 1808 and 1815, from the embargoes and the war. On the return of peace imports were resumed on a large scale and the

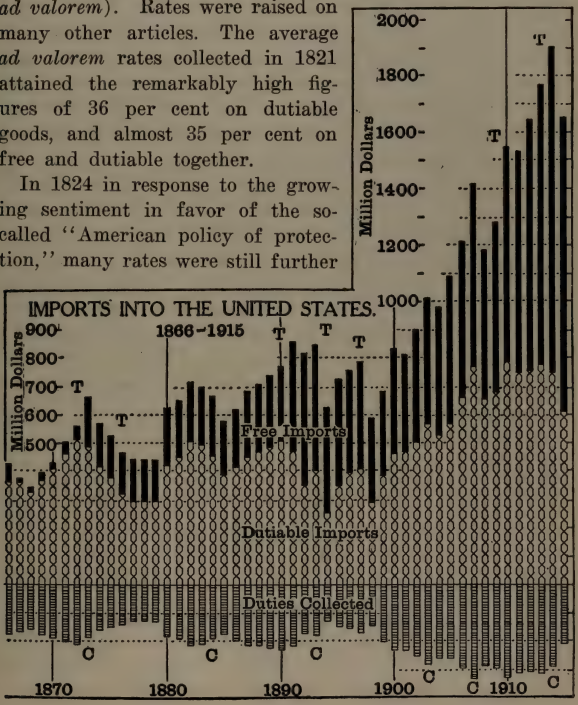
FIG. 3. IMPORTS INTO THE UNITED STATES.

Many statistics bearing upon tariff history are graphically brought together here. This figure should be carefully studied in connection with the following sections. Observe how invariably in the years following a crisis, the amounts of dutiable imports and of duties collected have diminished, whether the tariff meantime was changed or not.



call for a higher tariff was loud. In the revision of 1816, rates in a number of cases were fixed higher than those before the war. Average rates are said to have been about 20 per cent. The rate on both cotton and woolen goods was 25 per cent (and the minimum on cotton goods was a specific rate of 6¼ cents a yard). High rates were imposed on pig iron (50 cents a hundred), hammered bar (75 cents a hundred), and rolled bar ($1.50 a hundred, equivalent to about 100 per cent *ad valorem*). Rates were raised on many other articles. The average *ad valorem* rates collected in 1821 attained the remarkably high figures of 36 per cent on dutiable goods, and almost 35 per cent on free and dutiable together.

In 1824 in response to the growing sentiment in favor of the so-called "American policy of protection," many rates were still further



increased, as those on cotton goods and woolen goods (to 33⅓ per cent) and some kinds of iron. Cheap wool was now taxed 15 per cent and that valued over 10 cents a pound at 20 per cent (to be 30 per cent after 1826). In 1828, in the "tariff of abominations" which evoked much bitter criticism, the rates on all these goods were again raised, those on woolen goods being in some cases 100 per cent on the value, and those on iron being from 40 to 100 per cent on the value, and duties were levied on molasses, hemp, and flax. The results appear in the statistics of 1830, showing the average *ad valorem* rates on dutiable imports to be nearly 49 per cent, and on free and dutiable together to be over 45 per cent. This marks a temporary high point in tariff rates. Revenues were then becoming excessive and that year the rates on tea and coffee and some other goods were reduced.

Violent protests, especially from the South, were made against the protective system, and the tariff became a more important political issue. Then in 1832 a number of changes were made, mostly downward; the iron tariff, for example, being reduced to about the level of 1824. Average rates were thus brought down to about 33 per cent on dutiable goods. The compromise tariff act of 1833 provided for a process of reduction during a period terminating in 1842, the cut to be small at first, then to be made more rapidly to bring the maximum rate on any article down to about 20 per cent.[2] These changes, while as yet incompleted had, in 1840, brought the average rates on dutiable goods down to but 30 per cent and on free and dutiable together to 15 per cent. The 20 per cent rate, however, remained in effect only two months in 1842, when it was replaced by a tariff with higher rates distinctly protective, passed by the Whig party and which remained in force four years.

[2] Usually given as 20 per cent. However a good many rates under the full operation of the act worked out as 21½ or 23 per cent, and a few at 26 and and at 29 per cent. Besides there were numerous specific rates, the *ad valorem* force of which cannot be determined.

§ 6. **The tariff, 1846–1860.** The Democratic party coming into power, passed the Act of 1846, called the Walker tariff, after the Secretary of the Treasury. As he was a believer in free trade, this act is often mistakenly described as a free-trade measure. It was, in truth, far from that. Most of the rates were indeed lower than those that had been in force between 1816 and 1846 (with the exception of those between 1840 and 1842), but still some of the rates were high (a few as high as 100 per cent) and many of them were strongly protective in nature. The fact that tea and coffee were on the free list is marked evidence that considerations of revenue did not dominate. The rate on cotton goods was 25 per cent and the rates on many of the most important other protected articles (iron, woolen goods, manufactures of iron, leather, paper, glass, and wood) were 30 per cent. The average rates under the act for its last eight years (to 1857) were on dutiable 26 per cent, on free and dutiable 23 per cent. The country prospered for eleven years under this tariff. In 1857, rates were again reduced, the more important protective rates from 30 per cent to a level of 24 per cent. This time partizan considerations played no part in the discussion. The revenues of the government had been excessive and the need of a reduction was admitted by nearly every one. The average *ad valorem* rates under the nearly four years of the act of 1857 were about 20 per cent on dutiable and 16 per cent on free and dutiable (the lowest in the century between 1812 and 1913).

§ 7. **The tariff, 1861–1871.** The reduction of rates in 1857 was made just at the time when the country was at the height of a wave of prosperity and of speculation which culminated in the financial crisis of that year.[3] As always at such times, the government's revenues fell greatly. The first purpose in the revision of the tariff in 1861 was simply to

[3] The political argument that the small tariff reduction of 1857 caused the crisis of 1857 will not bear serious examination. See below, sec. 13.

restore the rates in the act of 1846. But the Morrill act which became a law just before Fort Sumter was fired upon, contained many higher rates and its purpose was avowedly protective. This necessarily involved a sacrifice of possible revenues for the government.[4] Then from the beginning of the Civil War till its close some rates were raised almost every month with little scrutiny or debate. The average *ad valorem* rate jumped from 19 per cent on dutiable in 1861 (under the law of 1857) to an average of 35 per cent in the three years, 1862–1865.

The most important tariff acts of the war were those of 1862 and 1864 by which large increases were made on many articles. These tariff acts were passed in connection with far-reaching and burdensome applications of internal revenue taxes on many kinds of manufactures. The tariff rates were primarily intended to offset these taxes, "to impose an additional duty on imports equal to the tax which had been put on the domestic articles," as was said by the sponsors of the bill. These rates were similar in purpose to compensatory rates, and in many cases they were more than sufficient to offset the internal taxes. Under the last of these acts the duties collected in the six years from 1865 to 1870 averaged nearly 48 per cent on dutiable and nearly 44 per cent on free and dutiable.

The remarkable fact was that soon after the war the internal revenue taxes began to be repealed one after another, and by 1872 nearly all those bearing upon general manufactures (apart from cigars and alcoholic beverages) were gone. The tariff, however, remained almost unaltered. This repeal of internal revenue taxation had the same "protective" effect as raising the tariff rates by so much. As if this were not enough for the protected interests, in 1867 the duty on woolens was further raised and in 1870 numerous other increases were made in the duties having a protective character. Some reductions were made, but these were almost all on

[4] See ch. 14, sec. 2.

articles of a distinctly "revenue" character such as tea, coffee, sugar, molasses, spices, wines! Revenues were superabundant for current expenses of government, and altho there was a large national debt, hardly any of it was redeemable at the time. There was therefore need to reduce taxation, but the attention of the consuming and tax-paying public was distracted by the somewhat passionate political issues of the day. Besides, the public had not the technical knowledge or the unified opinion on this subject to protect itself against the greedy lobby in this process of tax revision. And so, selfish commercial interests could get nearly what they asked for in Congress, and the politicians at Washington, who had come to have a well-nigh superstitious faith in the efficacy of very high protective duties, could quietly use the opportunity to raise the people's taxes for the people's good.

These virtual increases in the protective power of the rates in force are not evident in the statistics of average *ad valorem* rates, because the higher rates in many cases were sufficient to exclude relatively more of the foreign products to which they applied.[5] The imports came, by a process of selection, to consist more largely of goods subject to lower rates. So the year 1868 showed the highest average rate on dutiable goods (48.6 per cent) of any year after the act of 1828 until that of 1890, and the rate fell somewhat each year until in the fiscal year 1872 it was 41.3 per cent.

§ 8. **The tariff, 1872–1889.** In 1872 the country was again, as in 1857, nearing the crest of a wave of prosperity and of speculation. Imports and customs receipts attained new high points in our history, and, despite the enormous reductions of internal revenue taxation, the government's receipts continued to be excessive.[6] The important revenue articles, tea and

[5] See above, sec. 2, note 1.

[6] Internal revenue receipts in 1866 had been $309,000,000; in 1872 they had fallen to $131,000,000, yet the government's surplus for the three years 1870–1872 was little less than $100,000,000 a year. This was almost half of the total receipts from customs, which were $216,000,000.

coffee, were then transferred to the free list, as were also raw hides and paper stock and some other articles; the rate on salt was reduced one-half and that on coal almost as much. Many other specific rates were reduced and the *ad valorem* rates on a long list of articles were cut to "90 per cent of existing rates." The effects of these reductions were mingled with those of the severe financial panic occurring in 1873 and of the depression following, which reduced especially the importation of luxuries bearing the higher rates. The average rate of the three (fiscal) years 1873 to 1875 was 39 per cent on dutiable (a fall of 9) and 28 on free and dutiable (a fall of 16). The ratio of imports entering free, which in 1872 was still only about 1 in 14, became the next year 1 in 4. But government revenues falling short in 1874, advantage was soon taken of the circumstance to repeal in 1875 with little discussion the horizontal cut of tariff rates made in 1872. The specific rates that had been reduced in 1872 were little changed, however. From 1876 to 1883 (8 fiscal years) nearly a third of the imports consisted of goods on the free list. The average rate on dutiable was over 43 per cent, and on free and dutiable was 30 per cent.

The tariff was a leading issue in the campaigns of 1876 and 1880. In 1876, the Democratic party's platform contained a plank for "a tariff for revenue only." It was a time of great industrial depression, and as is usual in such cases a large number of the electors held the party in power responsible for business adversity (as in turn they credit it with any more or less fortuitous prosperity). The Republican candidate Hayes, after a long contest in Congress, was declared elected by a margin of one electoral vote. His opponent, Tilden had received a quarter of a million more votes in the country as a whole. In 1880, when business prosperity was rapidly returning, the party in power was successful by a goodly margin of votes in the electoral college, tho having a bare plurality of the popular vote. Garfield, the Republican candidate, was known as one of the more moderate protectionists and his

opponent, General Hancock, who was without any political record, declared the tariff to be a "local issue," to be determined in the Congressional districts. The tariff issue was thus not very sharply drawn. The tragic death of President Garfield left no clear leadership. The tariff question from 1876 to 1884 was politically in the doldrums.

Yet there was undoubtedly a somewhat growing popular demand for some moderation of the very high duties. To this demand the friends of protection who were in power felt compelled to concede something—or to appear to do so. Congress appointed a Tariff Commission of which the Chairman was secretary of the wool manufacturers' association, and after a report the tariff act of 1883 was passed. The net results were almost nil. Some rates were lowered, while others were raised with a definite protectionist purpose. The average rates for the next seven years, 1884–1890, were 45 on dutiable (an increase of nearly 2 per cent) and 30 on free and dutiable (unchanged as compared with the period ending 1883). In 1884, the Democratic party elected its presidential candidate (Cleveland) and a majority of the House, but as it did not control the Senate it could not pass any of the various proposed measures for a "reform" of the tariff. In 1888 the protective principle was a leading issue in the campaign. Altho Cleveland received a few ten thousands larger popular plurality than he had obtained four years before, and held the electoral votes of 18 of the states, he lost New York and Indiana by very narrow margins, a result in which other issues played a large part. Harrison was elected and the party favoring a high protective tariff came into power.

§ 9. **The tariff, 1890–1896.** The tariff act (known as the McKinley act) of October, 1890, followed. This was a general extension of the principle of protection. The rates on woolen goods were on the whole increased and made in more cases prohibitive. The rates on wool were increased. The rates on iron, which was already highly protected, were little changed except by the increase of the duty on tin-plates. The

duty on sugar (in the main a revenue duty, yielding $55,000,000 a year) was removed and a bounty was granted to domestic sugar producers. In the next three (fiscal) years, 1892–1894, the average rate proved to be over 49 per cent on dutiable (4 per cent increase) and 22 per cent on free and dutiable (the remission of sugar duties accounting for the most of this fall of 8 per cent from the average under the preceding law—4 per cent fall from the last year of its operation). Particularly noticeable, however, was the increase in the proportion of goods entering free, which was nearly 55 per cent of all merchandise as contrasted with about 33 per cent between 1884 and 1890.

Again the political weather vane shifted. The month after the McKinley bill became law, the Congressional elections (November, 1890) returned an overwhelming Democratic majority in the House, altho this was a period of business prosperity, a fact usually favoring the party in power. In 1892, Cleveland, being again a candidate, was successful over Harrison by a largely increased plurality of the popular vote, and received almost double the electoral vote of his opponent. The House was Democratic, and the Senate soon became so. Business prosperity was rising again to a high level, but there were many features of financial and speculative weakness in the situation, intensified by growing fear of a cheap money (silver dollar) inflation under the act of 1878 providing for the annual purchase of silver. A financial panic occurred in September, 1893, six months after Cleveland's inauguration.

Nevertheless Congress enacted the next year, Aug. 28, 1894, the Wilson tariff act. The changes made by this legislation were not on the whole very great, but were nearly all in the direction of the lowering of the tariff. Most notable was the putting of raw wool upon the free list. Some rates on woolen goods were reduced, but hardly more than enough to offset the effects, upon manufacturers' costs, of the reduction of the tariff on raw wool. Likewise small reductions were made on

cotton and silk goods, on pig iron, steel and tin plate and many other articles; and larger reductions on coal, iron ore, chinaware, and glassware. To make up for the expected reduction of receipts from other sources, a duty was laid again upon raw sugar, and an income tax law was passed (this soon, however, to be declared unconstitutional).

Under this law, for three fiscal years (1894–1897) the average rates were 41 per cent on dutiable and 21 per cent on free and dutiable,—pretty high rates. The proportion entering free under this act was actually less than under the McKinley act, partly because of the sugar item, and partly, probably, because of general business conditions.

§ 10. **The Dingley tariff, 1897–1909.** The campaign of 1896 was waged almost solely on the issue of free silver. Undoubtedly great numbers of voters supported William McKinley rather despite of, than because of, his high protectionist beliefs. But his inauguration was promptly followed by the passage of the Dingley act of July 24, 1897, which embodied a marked increase of protective rates. A duty was again levied on wool, and also on hides which had been untaxed since 1872. High rates were made for woolens, linens, silks, chinaware, and the rate on sugar was doubled. Provision was made for some reduction of rates by reciprocity agreements, but the conditions were so complex that the effect could not be great. This high protective tariff, thus enacted without popular discussion, remained almost unchanged for twelve years, the longest life, by one year, of any tariff act in our history.[7] The rate under the first full fiscal year of the law's operation, 1899, was the highest on dutiable in our history, 52 per cent, and was nearly 30 per cent on free and dutiable. In practical operation, however, the average rate steadily became more moderate because of the rapid rise of

[7] Other issues absorbed public attention in this period—the Spanish war, colonial policy, "imperialism," railway rate regulation, corporation control, etc.

the general price level that was in progress throughout this period, amounting to 35 per cent from 1898 to 1909.[8] The average rate of duties collected for the period of 12 years was 47 per cent on dutiable and 26 per cent on free and dutiable. It was steadily falling and the last year, 1909, was 43 per cent on dutiable and 23 per cent on free and dutiable.

§ 11. **Sentiment favoring lower rates.** While the Dingley act was thus in operation showing declining average rates, sentiment was developing in every part of the country in favor of a further moderation of the tariff. This was due partly to the discontent resulting from steadily rising general prices, in which change the rise in the prices of food and of many other necessities was not fully compensated by the rise of the wages and incomes of the masses. Partly the growth of this sentiment accompanied the agitation against trusts and the belief that protective duties in some cases were an aid to the formation of domestic monopolies. But more fundamentally, this changing sentiment was the result of the changing industrial conditions in America. The character of our foreign trade had altered greatly since the early nineties. We were importing relatively less and less of manufactured and finished products, and more of raw materials; and we were exporting less and less of raw materials and more of finished products. A growing number of manufacturers were feeling the need of cheaper raw materials and were looking hopefully toward an enlargement of their foreign trade.

The Republican platform in 1908, in view of the changing public sentiment, formulated a new rule for maintaining "the true principle of protection," namely, that it "is best maintained by the imposition of such duties as will equal the difference between the cost of production at home and abroad, together with a reasonable profit to American industries." This rule is very attractive in its suggestion at the same time of the idea of a moderation of the tariff and of an exact prac-

[8] See above, sec. 2.

tical (not to say scientific) standard for the determination of the proper rate in every case.

The rule is, however, fallacious. "Costs of production" mean here the monetary costs of the enterpriser. Now a first difficulty is that costs are not uniform for all establishments in any one industry, and a tariff high enough to protect some is entirely too low to protect others. As long as a tariff rate is too low to exclude every unit of the foreign product its importation is conclusive proof that for some home producers the tariff rates fall short of the "true principle" (better proof, indeed, than the most elaborate investigation by any tariff board could be). The indubitable truth is that no trade ever can take place (in a monetary régime) unless the monetary price is lower in the exporting than it is in the importing country. This virtually means that the product cannot be profitably exported unless the monetary costs of production ("together with a fair profit") of the article exported are for each party less than those of the other party in the other country.[9] The so-called "true principle" would lead thus to absolute prohibition of every article to which it was applied.

§ 12. **The Payne-Aldrich tariff, 1909–1913.** In the campaign of 1908 the Republicans admitted that the protective tariff needed to be revised, but they declared that it should be revised by its friends. It was doubtless the general understanding that "revision" in this promise meant revision downward, tho this was left somewhat unclear in a campaign wherein the tariff played a somewhat minor part. The tariff act of 1909 (the Payne-Aldrich act) was the attempt of the successful party to redeem its promise in this regard. Many changes of rates were made, both downwards and upwards. It was estimated that rates were reduced in 584 instances, affecting 20 per cent of imports. These changes included placing hides upon the free list (before taxed 15 per cent), and cutting down the rate on leather, shoes, coal, lumber,

[9] Compare with ch. 13, sec. 5.

iron ore, pig iron, and steel-rails. But on the other hand rates were increased in 300 instances (including many items in the cotton schedule). The general belief that little reduction was effected, on the whole, was confirmed by the experience under the act. As compared with the last two years (1908–1909) of the Dingley tariff the first two years of the Payne-Aldrich tariff showed a decline of 1.5 per cent, and on free and dutiable a decline of less than 3 per cent. These reductions in the statistical results are no greater than occurred within like periods while the Dingley act continued in operation without change.[10]

No other tariff since "the act of abominations" in 1828 has called forth such widespread criticism as this one, and the tariff became a leading issue in the campaign of 1912. After 1910, the House being Democratic, many bills to reduce duties were presented, and some were passed by both houses, but all were vetoed by President Taft mainly on the ground that it would be best to await the report of the tariff board which had been authorized and appointed for the purpose of ascertaining the cost of production referred to in the "true principle of protection."

§ 13. **The Underwood tariff, 1913.** After President Wilson was inaugurated, March 4, 1913, the tariff was at once taken up by Congress. The general features of the act that was passed were as follows:

(a) Considerable additions to the free list of raw materials.

(b) Abolition of compensatory duties corresponding with the old rates on raw materials.

(c) Replacement of specific by *ad valorem* rates in many cases.

[10] Probably resulting from the rising prices, as explained above, sec. 2. For example, in one year, from 1899 to 1900, the average *ad valorem* rate collected on dutiable goods fell 3 per cent, and that on all goods fell 2 per cent; in the two years from 1904 to 1906 the average rates on dutiable fell 4 per cent, and on all goods fell 2 per cent.

(d) Taxation of plain kinds of goods less than fancy kinds —luxuries higher than necessities.

(e) Reduction of rates generally (most of the few increases being to correct some evident error in the old law).

(f) Application of the so-called competitive principle to rates intended to be protective, viz., to leave the rate just barely high enough to keep out foreign products.[11]

Articles placed on the free list were raw wool (which had borne a rate equivalent to about 44 per cent), metals, agricultural implements, raw sugar (the lower rate to go into effect gradually), coal, lumber, many agricultural products including live cattle, meats, wheat, corn, flax, tea, and hemp, and numerous manufactures including boots, shoes, gunpowder, wood pulp, and print paper.

Moderate reductions were made in the schedules for chemicals, earths, cotton goods, and sundries, while rates on various luxuries were either unchanged or raised. Left almost unchanged were the schedules for tobacco, for spirits and wines, and for silks (already very high).

This act was signed October 3, 1913, and had been in operation about nine months when the great war broke out in August, 1914. What its effects would have been under normal conditions we can judge little from the actual experience. The first eight months that the act was in operation, the *ad*

[11] This "competitive principle" is essentially the same as the so-called "true principle" of equalizing the cost of production (see above, sec. 11). It is essentially a prohibitive, not a free trade, principle. Strictly applied it would cause complete exclusion of imports. But as applied to selected articles which it is desired to exclude in order to "protect" the domestic producer, this principle would simply prevent the rate being placed appreciably higher than was needed to exclude them. Anything beyond that point but offers temptation and opportunity for the formation of a monopoly by domestic producers. Then, too, the rate may intentionally be fixed so as to make just possible the survival of the most favorably located or most efficiently operated establishments, while compelling the abandonment of other establishments. See ch. 14, sec. 3.

valorem rate on dutiable goods proved to be 36 per cent (about 4 per cent less than in the preceding year) and the rate on free and dutiable together about 14 per cent (over 3 per cent less than the preceding year). The first complete fiscal year (that of 1915) under the act, the average rate on dutiable goods was 33.5 per cent and that on all imports was 12.5 per cent. Evidently this is far from a "free trade tariff." The reduction in the average *ad valorem* rate is less than was expected. Many of the reductions had little effect, the former rate having been much higher than was needed to exclude the goods. In other cases the old rates were but nominal and inoperative because they were upon goods regularly exported, not imported (e.g., farm products, cotton goods, and some other manufactures). But some of the reductions doubtless will force the less efficient plants in some industries touched to increase their efficiency or go out of business. Time, in any normal period, is needed for adjustment, but an adjustment of a most abnormal kind is in progress during the war. Imports from Europe have fallen greatly, while exports are enormously increased. Old industrial establishments have been converted to different and temporary uses. The conclusion of the war must bring a new readjustment that must cause a severe shock to some enterprises—and this must have been so under any possible variety of tariff.[12]

§ 14. **Some lessons from our tariff history.** Can we draw from the checkered course of tariff history in America clear lessons of wisdom for the future? At least certain negative conclusions may be safely drawn. It is a history of a vacillating public opinion toward the policy of protective duties. Always the policy has kept some hold on public sentiment, but it has varied in strength, now waxing, now waning. The time of revisions has been determined nearly always by varying needs of revenue. When more income has had to be

[12] Such changes are logically related to the subject of financial crises rather than to that of the tariff. See note at end of the next section.

raised, this has nearly always been made the occasion and pretext for increasing the degree of protection for many industries. This is not at all a necessary connection, for it would be possible to couple internal revenue taxes and customs duties in such a way that the rates would go up and down together and give the varying amounts of revenue required for the government without appreciably altering the relative profitableness of various private enterprises.

Our tariff history is too largely a record of special favors granted to classes of citizens, to the citizens of certain localities, and to particular enterprises. This is apparent even in a general survey, but almost every more detailed examination of particular protective rates reveals evidence of suspicious and sometimes scandalous personal influences at work. The protective policy has always professedly been advocated for the general welfare to raise wages or to make the country prosperous, but the initiative has always been taken, and the valiant work in contributing funds for campaign purposes and in lobbying bills through Congress has been done, by the interested manufacturers. Even if it were beyond question sound in principle to exclude goods that can be bought more cheaply by trade, it is very doubtful whether any net good could have resulted from this policy as it has been in fact applied and followed. The frequent and unpredictable changes have been a great evil, and have again and again brought unmerited losses to the many in business and still greater and unearned gains to a favored few. It is incredible that such a hit-or-miss, in large part selfishly determined, policy could have been an important cause of our national prosperity. The fundamental causes of the general high wages and popular welfare that we have enjoyed is to be found rather in our rich natural resources, our capacity for self-government with free institutions, and the industrial energies of our people.[13]

The revision of the tariff of 1913, viewed with non-partizan

[13] See Vol. I, e.g., pp. 228, 431, 445ff, 466, 490, 506ff.

eyes, appears to have been carried out, to say the least, as consistently with regard to its professed doctrine, and as little influenced by the malevolent arts of the old-time Congressional lobby, as any debated tariff act in our history. It still contains on the whole a large measure of protection. Under various pretexts such as the danger of a flood of cheap goods after the close of the great war, attempts will be made to make it still more prohibitive. But one lesson of our tariff history is that such an act should be given a period of fair trial before extensive changes are made in it. Even further reductions should be cautiously undertaken and put into effect gradually. If the attempt is made through temporary rates to reduce the shock of the trade adjustments, of the "dumping" after the war, then the devising and administration of such measures should be delegated to an expert, disinterested, permanent tariff board. The task is to prevent temporary "unfair competition" and sudden changes, rather than to raise permanent barriers to fair trade.[14]

[14] **Tariff legislation and business depressions.**

The relation between new tariff legislation and the business conditions following it has been the subject of much debate in political campaigns. In the few cases where a relationship has been most often asserted to exist, it is more probable that the tariff change was the *result* of business conditions preceding it, than that it was the cause of the conditions following it. For usually a tariff has been revised downward because a few years of prosperity with large imports had so increased customs duties that the government has had surplus revenues. Just when the tariff was reduced, the conditions were ripe for a crisis. This happened in 1857 (already in 1856 there had been a preliminary halt of business), again in 1872, and on a small scale in 1883. But the main reduction resulting from the compromise act of 1833 did not occur until after the crisis of 1837–39; the Walker act of 1846 was passed just as business was starting upward on a long wave of prosperity; and the act of 1894 was passed a full year after the severe crisis of 1893, when business had already entered upon a period of depression. In none of these cases does it seem reasonable to attribute business depression to the reduction of the tariff, as is commonly done in protectionist arguments even to the point of attributing the panic of 1893 to the reduction of the tariff a year later!

At several times the tariff has been raised soon after a crisis when a good occasion was presented by the need of larger revenues as in 1842, 1860, 1875, and 1897. Business at such times is just at the point of the cycle when prosperity is due. The higher tariff of 1842 was succeeded by the low tariff of 1846 without any check to business. The war obscured the ordinary industrial effects of the tariff acts of the sixties. The increase in the year 1875 was followed by four years of hard times and slow recovery. The increase of the tariff in 1890 occurred as business was nearing the top of the cycle and was followed by two years of prosperity culminating in the very severe crisis of 1893. The authors of the tariff of 1897 were peculiarly fortunate in the time of their action, for the country was just fairly recovering from the very severe crisis of 1893 and prosperity was to continue (with brief hesitation in 1900 and 1903) until the severe crisis and panic of 1907.

The advocates of higher rates are, of course, correct in declaring that the great business prosperity of the years 1915 and 1916 resulted from the unexpected demands in foreign trade growing out of the war, and is not to be credited in large measure to the act of 1913. But reason requires that the same restraint be exercised in crediting to higher protective acts the prosperity which has in some—not all—cases, followed their enactment; and requires further that the present act be not held accountable for the next reaction in trade, whenever it may occur, inasmuch as a reaction would be sure to occur no matter what kind of tariff act we might chance to have at the time.

CHAPTER 16

OBJECTS AND PRINCIPLES OF TAXATION

§ 1. Public finance as a division of economics. § 2. The police function. § 3. Social and industrial functions. § 4. The enlarging sphere of the state. § 5. Industrial revenues of governments. § 6. Governmental receipts from loans. § 7. Nonrevenue character of receipts from loans. § 8. Revenues from taxation. § 9. Forms of taxation. § 10. Defective tax "systems." § 11. Various standards of justice suggested. § 12. Social welfare as the aim. § 13. Principles of administration. § 14. Shifting and incidence. § 15. Taxes as costs.

§ 1. **Public finance as a division of economics.** Men live together in politically organized societies which employ public officials as agents to carry on the functions of government. Every governmental unit, large or small, may be viewed not only as a political body, but as an economic enterprise. Each has its economic aspects, such as receipts and expenditures, employer and employee, borrowing and lending, etc. Each political unit is in this sense "an economy." The study of the public economy, of the economic aspects of government as distinguished from its political aspects, constitutes the science of public finance, an important division, tho not the whole, of political economy.

The primary fact determining the public finances is the extent of the sphere of "the state," meaning by the state the totality of political powers and functions in a community. There are two typical ideals of a state, each with corresponding functions: the ideal of the police state, and that of the social-industrial state. In fact every system of government provides for the exercise of both functions in some measure. The police function is primary. All governments alike exer-

cise it, but they differ most in respect to the degree in which they exercise the social-industrial functions.

§ 2. **The police function.** The police function is that of public defense and the maintenance of domestic order. In family or patriarchal communities all share a common income and combine in the common defense, but self-preservation often has compelled such small communities to form a larger, stronger state for the common defense. Public defense requires sacrifice of some independence on the part of the family and of the individual. Personal service in the field gives place later in some measure to the payment of taxes, so that a regular income may permit the government to attain a more regular, continuing, and perfect organization of military forces.

As political unity and power grow, the citizens need less often protection against foreign foes, and they need more often, relatively, defense against the aggressions of some of their own countrymen. The preservation of domestic order requires police, courts of justice, and other agencies. The ideal of the anarchist to do without government is nowhere realized. Everywhere there must be government to preserve peace and to protect property. Unfortunately, this need grows with the growing density of population. Crime increases when men swarm in great cities. The courts which settle disputes between men, and which interpret their contracts, are agencies of peace, displacing physical contests. To maintain and operate the various parts of the social machinery requires ever increasing governmental revenues. From many causes government has, in modern times, grown increasingly costly.

§ 3. **Social and industrial functions.** The social and industrial functions of government seem naturally to grow out of the primary ones just mentioned. In a democratic society, popular education is a necessity, as it appears that domestic order is not possible in a democratic state without intelligent citizens. The system of public education has, in many states, expanded to include a publicly supported university as the

dominant educational and scientific organ of the community. Some industrial functions are performed by the government in connection with the primary needs. Lighthouses are necessary to guide the navy, but they also serve to guide the merchant marine and to aid industry. The post was established as an agent of political and military government to connect the ruler with the outposts (a fact the name post indicates), but the postal service has grown in every country to be a great industrial and social agency. The consular service, originating in the political need of keeping official representatives in foreign lands, has become a valuable economic agency; consuls are commercial agents, advancing the business interests of their countries in all quarters of the globe.

§ 4. **The enlarging sphere of the state.** A mere police state would leave to private initiative the provision of every kind of economic agencies not needed for political government. The state might, for example, even leave the provision of roads and bridges to private individuals or to companies, permitting them to charge tolls to obtain a return on their investment. Whenever a toll-road is made public and a toll-bridge becomes free, and the state maintains the roads, it is becoming less strictly a mere police state. Reacting from the ideal of the police state which was most highly praised in the first half of the nineteenth century, the functions of government have been extending in many directions in the last half century. More and more economic functions are performed through the agency of government. If we think of an act as done by the government *for* private citizens, we call it paternalism; but if we think of an act as done *by* citizens collectively *for* themselves as the best way to get these things done, we may call it, in a broad sense, socialism.[1]

Government is in one aspect a direct good to its citizens. In return for its collective cost men collectively get the enjoy-

[1] Meaning here not a certain political party, but a principle of social action.

ment of social organization, markedly in contrast with the uncertain ties and hazards of primitive communities. But government becomes also a mode of social investment, an indirect agent, a productive enterprise. Wealth applied through it secures in some cases a greater product than is possible by individual action.

But when the government undertakes these various tasks the expense falls unequally on individuals and affects differently their incomes. When free schools take the place of private schools, the law compels every one to contribute to education. To many individuals it is a matter of indifference whether they pay tuition or taxes, but the wealthy bachelor sometimes grumbles when forced to help in educating the day-laborer's family. The average result of a certain social policy may be right, but individuals diverge from the average and thus have constantly a motive to attempt to change the limits of governmental action. Happily the subject is not always viewed with selfish eyes. The ethical and patriotic thought is not, "How will this affect my interests?" but, "How will it affect the general interests?" But as the question of value is always involved men are usually found favoring or opposing the industrial and social activity of the state according as it affects their own incomes. Thus the determination of the sphere of the state is in large part an economic question.

§ 5. **Industrial revenues of governments.** The costs of government at any stage are met in varying degrees in one of three ways: (1) from industrial sources, (2) by borrowing and thus creating a public debt, (3) from taxation.

(1) Receipts from industrial sources in the broad sense include all rents from wealth owned, interest on loans made, and proceeds of sales from enterprises conducted, by the government. In feudal times, these were mostly obtained in the form of rents from the private domains of kings and nobles. In many early and medieval states these sources of receipts were adequate to the need of government; then they

decreased in many countries, both relatively and absolutely, because of the sale of publicly owned wealth (lands and mines) and with the recent extension of the functions of government have again increased very rapidly. Now industrial revenues come not only from the rents of forests, mines, docks, lands, and buildings, but from profits in the operation of industrial enterprises such as waterworks, railways, mines, and factories, and from interest on funds deposited in banks or otherwise invested. At present the industrial revenues of the aggregate governments of the United States (national, state, and municipal) amount to about a fifth of all revenue receipts. Since the middle of the nineteenth century the number and variety of the industrial enterprises undertaken by governments has been steadily increasing, and this increase has been most marked in the cities. The change in this respect in the United States, great as it has been, has been proceeding more slowly than in the European countries.

In 1913 the receipts of this nature (earnings of departments and of public service enterprises) were nearly $500,000,000. The larger part of this sum comes to the national government ($288,000,000), mostly from the post-office department. Most of the remainder comes to the minor divisions ($176,000,000), and but little to the states. The total "earnings" (this means here receipts, not profits) of public service enterprises in incorporated places were $120,000,000.

§ 6. **Governmental receipts from loans.** The funds to invest in these commercial undertakings are originally obtained in nearly all cases from public loans. Almost every unit or division of government may become a borrower to provide for its citizens at once certain needed advantages and improvements when the funds are not at hand and immediate taxation is deemed too heavy a burden.[2]

[2] The total debts of the *national* governments of the world just before the outbreak of the great war in 1914 were estimated at about $44,000,000,000. (These figures include the debts of the separate states in the federal unions of Australia and the German Empire, and the separate

The indebtedness (less funds available for payment of debt) of the aggregate governments of the United States in 1913 was:

Nation	$1,028,000,000
States	346,000,000
Minor divisions	3,476,000,000
Total	$4,850,000,000

The larger part of nearly every national debt has been incurred for purposes of war and preparation for war, while nearly all public debt other than national has been created for the purpose of peaceful social and industrial development. The debts of the American states have partly been made necessary to meet deficits in current expenses, but largely of late to erect public buildings, purchase forest lands, improve roads, and construct canals. The minor divisions are counties, cities, villages, boroughs, towns, townships, school districts, drainage, irrigation, and levee districts, fire districts, poor-relief districts, road districts, and various other subdivisions of states and of counties. Every one of them has more or less legal power to incur debts and to levy taxes for the purpose of paying the interest and of repaying the principal. The purposes for which the debts are incurred by specially organized districts are sometimes indicated in the names (e.g., drainage, irrigation), while the regular political divisions of counties, cities, villages, towns, townships, incur debts for a large variety of objects, such as streets, sewage disposal, water supply, electric light or gas plants, school houses, libraries, and other public buildings. Large expenditures for these purposes are necessary because the local governments are undertaking new functions, and either existing equipment (such as waterworks systems, and street railways) must be bought from private companies or new ones must be built. They are necessary

debts of European colonial governments, but not those of the states of the United States, and in no case including the debts of minor divisions, the total figures for which are not to be had.) The new debts created by the war give already more than double the foregoing total.

further because the rapid growth of population calls for an immediate "capital investment," the payment of which may be, through borrowing, more easily spread over a series of years (e.g., in the extension of streets and paving, and in the provision of school houses for the children).

§ 7. **Nonrevenue character of receipts from loans.** The proceeds from loans (and certain other items of sales) are called nonrevenue receipts, because they are but in anticipation of receipts from other sources. The economic theory of such loans is essentially the same as that of private loans, but it is the people of the political district collectively that are the borrowers. To get the present uses of goods they sell their promise to make future payments totaling a larger amount. The loan is the present worth of those promises. In the case of loans made for local purposes, provision is now usually made for their complete repayment within a definite number of years, usually 10, or 20, or 30. Meantime interest is payable annually or semi-annually, and from some source an additional sum is collected to repay a part of the loan, sometimes by redeeming a certain part annually, sometimes by accumulating a sinking fund until that amounts to the whole debt.

The minor divisions in the United States are thus constantly creating debts at the rate of about $2,000,000,000 each year and at the same time paying former debts in instalments, in a total amount somewhat less than this. In the case of some municipal investments which are commercial enterprises (such as those supplying gas, electricity, and water), these annual payments can be made out of the profits; in the case of others, the payments come from special assessments upon the owners; and in most other cases they are collected by the usual methods of taxation. In America, a large part of these costs are, by the law of special assessments, placed upon the owners of adjacent lands, whose outlays are usually more than offset by the increased value of their lands as a result of the improvements. In this case also, the present investment is in

anticipation of the future incomes which the owners of the improved lands will get.[3]

§ 8. **Revenues from taxation.** Much the largest part of the receipts of most governments, apart from loans, and in many cases nearly all such revenue receipts, come from taxation. Tax (as a verb) meant originally to touch or handle, then to estimate or appraise, and then to charge a burden upon some one, especially to impose a payment of services, goods, or money upon persons or property for the support of government.[4] *Taxation* is the legal process of taking income, services, or wealth from private persons for public uses.

Taxes are of various kinds, but they always are incomes, or wealth representing future incomes, transferred from private ownership of the taxpayers to the government. In rare cases, more than the net current income of a certain kind may be taken for public uses. As economic income has many sources, it may be intercepted at many different points, and taxation may take various forms. The differences are so manifold that it is difficult to classify particular taxes satisfactorily.

§ 9. **Forms of taxation.** The following are the forms of taxation most frequently referred to.

(a) The simplest form of tax is a *poll tax*, a uniform amount payable by every person of the taxable class. This form of tax is being less and less used in America and now amounts to little more than $17,000,000,[5] this being only .6 of

[3] The special assessment is thus in its nature, in part a private investment. The plan of special assessments could easily be applied in many more cases than is done at present.

[4] There are border-line cases where it is difficult to decide whether a particular payment to the government in the form of a fee, price for service (as water rates, etc.), and special assessment (as for street paving) is in the legal sense a tax or not. Some courts have, for example, decided that for certain purposes a special assessment is to be called a tax, and in certain other cases it is not to be if this would defeat the evident and just intention of the legislature.

[5] The figures do not include returns from incorporated places having a population of less than 2500 where the poll taxes may be a considerable sum.

1 per cent of the aggregate taxes in the United States. The national government gets about one-fourth of this amount from a tax on immigrants and the rest is collected by (some of) the states, counties, and minor divisions. Usually, if not always, the poll tax is imposed only upon voters, as a condition to the right to vote.

(b) Taxes may be laid upon *incomes,* as they come into the possession of the owner. Usually, only monetary incomes that arise in commercial transactions are taxable, and no attempt is made to estimate the value of psychic incomes. Commercial incomes are more easily measured, but the omission of the other elements must cause many inequalities in the burden of the tax as between two individuals controlling equal incomes of real things.

(c) Taxes may be on *property,* either general upon all property in the taxing district, or special, upon certain forms of property. A property tax may be specific or *ad valorem,* in proportion to value, as to the method of its determination. Since the value of material wealth is the capitalization of the rentals at the prevailing rate of interest, a general, *ad valorem,* property tax, so far as it applies to material wealth, and if it were accurately assessed, would take an approximately equal proportion of wealth-incomes. It does not, of course, touch directly incomes derived from wages and salaries, but it reduces their purchasing power in many cases. It is in some respects more searching than a tax on actual rents, for it reaches the prospective, or speculative, rental.

(d) Taxes may be on *expenditure* (sometimes called taxes on consumption). This is but another mode of attacking income, for in the long run most income is spent, not always by the individual who earned it, but by some one, and thus it is reached by a tax on expenditure. Usually in the United States the tariff duties are accounted to be taxes on expenditure, as also the internal revenues (also called excises) of the national government. In time of war, internal revenues are extended in the United States to a multitude of articles, but

usually they have been limited (with minor exceptions) to liquor and tobacco. Most of these taxes are in fact levied not at the time of purchase by the ultimate consumer, but upon the specific goods in the hands of some merchant or business agency, and some of them are essentially special property taxes and others are business taxes of the kind next to be mentioned.

(e) Taxes may be levied on selected agencies of industry or on the process of *business;* such are business taxes, licenses, taxes on investment in business, and corporation taxes. These burdens are diffused and rest eventually on some income, rarely to be ascertained exactly.

§ 10. **Defective tax "systems."** The actual tax laws of each division of government in a country combine the various forms in different proportions. Most of the federal taxes are from tariff duties and from internal revenues; the latter include a variety of special business and property taxes and, since 1913, the federal income tax. The largest receipts of states, of counties, and of minor divisions are from property taxes, some special but most of them general in form. Among the various states a wide diversity is found. Some use the general property tax for all the divisions (state and local), while others (several of the Northern states and California) have separated the sources of state and local taxation, taxing corporations for state purposes, and most other forms of wealth for local purposes. Some states, particularly those of the South, make large use of licenses and taxes on business both for state and local purposes. The tax laws of many states have been much modified of late and are still in process of change. It is only in a loose sense that one can speak of the tax "system" of any state, made up as it is of so many diverse elements, each used to tap in some independent way some source of private income for public purposes. Every tax "system" has grown up more or less accidentally, guided by no more of a general principle than the advice of the cynical old statesman—so to pluck the feathers of the goose that it

will squawk as little as possible. Thus, everywhere, the existing situation must be largely accounted for by custom and ignorance, by the weakness of some classes and the undue influence of other classes, rather than by clearly thought out principles soundly administered.

§ 11. **Various standards of justice suggested.** There have not been lacking earnest attempts to arrive at some general principles. Many standards have been suggested to measure the distribution of the burden of taxation, such as benefit, equality, and ability. Each of these terms is capable of various interpretations which have changed from time to time. The benefit derived by any citizen from most of the public services evidently cannot be measured with exactness. The standard of equality cannot be applied in any literal sense to strong and weak, to rich and poor. It is possible, however, to interpret equality with reference not to objective goods, but to the psychic sacrifice occasioned by taxation. Ability is of many kinds and may be differently understood. Some think ability to bear taxation is "in exact proportion to the money income"; others believe that it increases at a greater rate than money income, and favor, therefore, progressive taxation, that is, higher rates on the larger incomes.

§ 12. **Social welfare as the aim.** The conflicting interests of the various classes of taxpayers in each period are to some degree softened by the prevailing public opinion, sometimes called the social conscience, and taxes are adjusted according to a vaguely held ideal of the social welfare. Social expediency, more or less broadly interpreted, determines who shall be taxed and what social results are to be sought. The exemptions from taxation in feudal times were great and, viewed from our standpoint, were inequitable, for the upper classes escaped while the peasants bore most of the burdens. The landlords and nobility, who were assumed to be performing important social functions, generally had outgrown their usefulness in the period preceding the French Revolution, which swept away many of these abuses.

Exemptions from taxation are granted liberally in most states to-day on some kinds of wealth and to some classes of citizens, because of their supposed relations to the public interest. Real estate and equipment devoted to educational, religious, and charitable purposes, the homes of priests and ministers, homesteads purchased with pension money, as well as all public lands, buildings, and equipment are exempt.

The social interest requires that taxes be both elastic and productive, so that the needs of the government shall be amply provided for. The harmonizing of these needs in the laws of taxation requires a high degree of wisdom, of foresight, and of integrity in the legislator and in the citizen. No hard-and-fast rule for the apportioning of taxes can be laid down. The decision must be made in each generation by the public opinion as to what is most expedient for the general welfare.

§ 13. **Principles of administration.** Whatever forms of taxes are adopted, whether on property or income, whether at proportional or at progressive rates, their justice and expediency depend largely on their administration. Principle and practice in this, as in most affairs, may go far apart. The administration of taxation should be economical, certain, and uniform. Some laws are more easily and economically executed than others. The time of collection should be as convenient as possible for the citizen, and the mode of payment should be the most simple. The utmost certainty is desirable as to the time, method of payment, and amount. Taxation that, in its principle, is variable, shifting, or dependent on personal whim and favoritism, is despotism. But the greatest evils, in practice, result from the failures in assessment. The assessment of taxes has to be intrusted to men with fallible judgment, imperfect knowledge, and selfish interests. The assessor is as near a despot as any agent of popular government to-day. Not infrequently men of proved incapacity in every private business they have attempted are, for partizan or corrupt reasons, selected as assessors, and are given the power of passing judgment on the value of millions of dollars' worth of

property. Under the circumstances, evils are to be expected, and they occur. The small owner often is crushed under the unequal assessment while the large owner comes lightly off. Political friends are favored, political foes are made to suffer. Even the most honest and capable of assessors find in the imperfections of the tax laws[6] an insuperable obstacle to even-handed justice.

§ 14. **Shifting and incidence.** The person paying a tax into the public treasury is not always the one whose income is reduced in the long run. This is most clearly seen in the case of taxes paid by middlemen. In most cases the final and regular burden of the tax is distributed over a number of incomes. The passing on of the burden is called the *shifting* of the tax; the final location of the burden is called the *incidence* of the tax. The lawmaker cannot tell exactly where the weight will fall. The principles of value give some guidance in the inquiry, but the workings of the principle are difficult to follow.

Consider a situation where certain taxes have been for some time levied. They have become a part of the general adjustment of prices. If paid by any one in business they may be looked upon as a deduction from the gross proceeds or product of the business, prior to cost, or as a part of cost.[7] In either case every one choosing that business does so in the light of this fact. Unless the business promises to yield as good incomes (wages, profits) as other lines, the number engaging in it, and the output, must diminish and thus the price of the product rise, or the cost of the factors fall, or both in some proportion. The tax on any durative agent or on any established business thus becomes incorporated after a time in its price and in the prices of the products, and any purchaser pays a price based on the net income remaining to the owner of the wealth after the tax is paid. Viewed in this way, taxes are seen to be borne to some extent by every one, by those who

[6] Particularly the difficulties noted in the next chapter, secs. 2–5.
[7] See Vol. I, p. 374.

do not as well as by those who do actually meet the tax-collector face to face. The citizen with no taxable property is affected, far more than he realizes, by extravagance of government and by inequities in taxation, for the effects of most taxes are diffused so that every self-sustaining member of the community has some share in them.

§ 15. **Taxes as costs.** Now if a new tax is levied, or an old tax changed in amount or in its incidence, it becomes a new influence in industry. Some occupations are made more attractive, others less so. Some places are made more, others less, desirable to live in. Property thus fluctuates in value, and investments become more or less remunerative. If the new tax reduces the net income of any productive agent, it reduces likewise its value, which is but the capitalization of its net rental. If taxes are taken off of factories and put upon farm rents, factories rise and farms fall in value in the hands of their owners. The immediate change in value is much greater than the annual tax, for if five dollars is to be taken permanently from the annual rental of the farm, nearly one hundred dollars is taken at once from its selling value when the prevailing yield on investment is 5 per cent. The rate of adjustment varies greatly under different conditions, and the inflow and the outflow of labor and capital are more or less rapid in the various industries.

Taxes that enterprisers are unable to shift to others are reckoned by them as a part of their costs of production whenever the conditions of competition and of substitution make it possible to do so. Every new tax that curtails the supply of any necessary agent must raise the price of the products and cause more or less of the tax to fall upon the consumers. In the Civil War an increase in the tax on whisky increased its selling price, and distillers who owned stocks on which a smaller tax had already been paid reaped profits of millions of dollars. When the tax on tea was increased in England, all dealers that had accumulated a stock before the law went into effect were gainers. Every change in taxation inevitably

affects, either favorably or unfavorably, many interests. The chance to anticipate a change in tax laws or to get, from those in power, information of a proposed change, makes speculation possible and political corruption profitable.

The fact that a change in taxation is a disturbing element in price is not to be deemed insignificant merely because "all comes out right in the end." Every change in taxation is an element of uncertainty in business and increases the fortunes of some men at the expense of others. Hence no considerable change should be made without good reasons in its favor. The older taxes have the virtue of stability, but in many cases they have grown out of harmony with the industrial conditions. While, therefore, from time to time there is a real need of a reform in the tax system, it should not be undertaken without recognizing the many and complex interests involved.

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CHAPTER 17

PROPERTY AND CORPORATION TAXES

§ 1. Importance of taxation as a public question. § 2. The general property tax; nature and difficulty. § 3. Ambiguity of the term "property." § 4. Various temporizing policies. § 5. A consistent policy of wealth-taxation. § 6. Needed reform of assessment. § 7. Separation of state and local taxation. § 8. Federal taxation of merchandise in commerce. § 9. The proposal of the single tax on land values. § 10. Various reforms in land taxation. § 11. Difficulties in taxing corporations. § 12. Special taxes on banks. § 13. Special taxes on insurance. § 14. Special taxes on transportation. § 15. Alternative policies of corporate taxation. § 16. General plan for corporate taxation.

§ 1. **Importance of taxation as a public question.** The discussion of taxation has accompanied the growth of free government in England and America from the time of Magna Charta. The control of the public purse has been found to give the key to political power, and therefore it has frequently become the occasion of conflict between the monarch and the people. But in our own national history since the adoption of the Constitution, taxation has not had a leading place in politics except in the one aspect of the tariff. The constitutional question of states' rights long absorbed most of the interest of citizens and of legislators. But with the quickened attention of the public to economic questions, the problem of taxation became of increasing importance.

It has come to be recognized that taxation can be made to play, and is bound to play, a leading part as an agency in the distribution of wealth, and thus it is the center of much of the ardent controversy regarding social reform. Ultimately, almost every proposal of social change and betterment involves

some cost. The question then must be answered, Who is to receive the benefits and upon whom and how shall new taxes be levied to pay the cost? Further, it is often urged that this result of taxation in redistributing incomes is in itself (or can be made) a virtue; and some even see in tax reform the answer to the largest social questions of our time. We are now to take up a few of the more important problems of taxation, to see the difficulties, and to suggest the direction in which their solution is to be sought. The tariff having been already separately considered, the chief kinds of taxes we have here to treat are property taxes, general and special, and inheritance and income taxes.

§ 2. **The general property tax; nature and difficulty.** The rates both of assessment and of levy of the general property tax are uniform and equal in proportion to the value of all (or nearly all) property in the taxing district.[1] There are always some exceptions of certain kinds of property, or of the property of certain persons, or of property and things put to certain uses—public, educational, religious, and charitable in their nature.

The federal government levies no general property tax, but the other branches of government [2] receive about three-fifths of all their revenues from it.

At first view nothing would seem to be simpler and juster in principle than such a plan of taxation, but those who have

[1] For example, the constitution of Alabama declares: "All taxes levied on property in this state shall be assessed in exact proportion to the value of such property," etc. And the constitution of Indiana declares: "The general assembly shall provide, by law, for a uniform and equal rate of assessment and taxation of all property, both real and personal, excepting," etc. Similar statements occur in most state constitutions.

[2] The general property tax in the United States constitutes:

Of the revenue receipts of the states.....38 per cent.
Of the revenue receipts of the counties .....76 per cent.
Of the revenue receipts of the incorporated places..60 per cent.

The total amount collected in this way in 1913 was over $1,083,000,000.

most carefully studied its practical operation, almost with one accord, pronounce it to be "a dismal failure." The chief reason assigned for this failure has been that the assessment of the tax is imperfect and incomplete. The usual thought is that if all property could be assessed the plan would be excellent. Undoubtedly the difficulty of just assessment has its part in the weakness of the tax, but back of, and more important than this, is an inherent fallacy in the apparently simple principle of the tax.

§ 3. **Ambiguity of the term "property."** Unfortunately, the word property is applied, even by the most competent courts, both to the intangible right of ownership (the fundamental meaning) and to the concrete thing that is owned, the source of the income.[3] But evidently the value of the right to the income yielded by a house, for example, is merely the value of the house. The value of the *property in the one sense* (the abstract ownership, the intangible right) is merely a reflection of the value of the *property in the other sense* (the concrete wealth). There are not here two independent bodies of economic wealth. Whatever value belongs to the one is subtracted from the other. Nor is it rational to take the paper document called a deed (which is but the evidence of ownership) and call it tangible property having a value in addition to the house itself. Yet, in fact, all these confusions are constantly made in taxation. The term "intangible personal property" is applied to such things as mercantile credits, promissory notes, bonds—in general to the right to collect sums from another person, whether these rights arise out of sales or of loans—and all are treated as parts of taxable property. Sometimes the evidences of indebtedness, the promissory notes or the mortgage papers, are even called tangible property, the same term that is applied to land, houses, and machinery. By universal practice supported by a long line of court decisions, these rights (whether evidenced by paper or not) are made subject to taxation, except as by

[3] See above, ch. 2, secs. 2, 3, and reference there to Vol. I.

piecemeal legislation certain grudging exceptions have been made. These views and this practice are supported by the popular desire to tax money-lenders. The result is "double taxation" of many sources of income. This involves a burden that is ruinous in some cases, both to borrowers and to lenders, and that tempts in all cases to the evasion of the tax.

Take, for example, a house assessed at $10,000 which is owned free of debt and which has a rental value of $600. At the rate of 1.5 per cent the tax paid would be $150. Now if the owner borrows $8000 he is still taxable $150 on the full value of the house, and the lender nearly everywhere is taxable $120 on the amount of his mortgage. The total tax payable out of the one source of income, the house, is then $270. The same analysis will show that any credit is but a contractual claim upon some other source of income which is, or should have been, already taxed.

If one person owns all the capital-value invested in a specific piece of wealth, no attempt is made to tax both the capital and the wealth; but if it happens that two or more persons share the capital-value invested in the same wealth, the attempt is made to tax as a unit the full value of the wealth and, in addition, some part of the capital also. It is, however, easy in most cases to conceal this "intangible property" from the assessor's eyes, and a comparatively small amount of it is ever taxed. This means inequality and hardship in the operation of the tax and, as a result, unceasing temptation to perjury by the taxpayer and to favoritism and graft by public officials.

§ 4. **Various temporizing policies.** The general property tax in practice is unjust and demoralizing. What, then, shall be done about it? Various policies have been followed. One has been to declare that the law would be good if it could be enforced, but that as in practice it cannot be, the best thing is to go on as before, catching a few "tax dodgers," and letting the rest go. Another policy is to hire "tax ferrets," paying them large commissions to discover cases where intangible

property of this sort has been concealed from the assessors. This method, no matter how stringently applied, has never reached more than a small proportion of the cases, and becomes a potent agency of political favoritism and corruption.

Another policy is to maintain the general principle, but to make exceptions here and there. Usually the exceptions are made just at those points where the law would with earnest effort be most easily enforceable, and therefore where it has become most inconvenient. As a result of these changes the state laws display a bewildering and illogical variety. By constitutional interpretation, United States notes and federal bonds are exempt from state and local taxation; generally, by state law, building and loan association and savings-bank loans are exempt as, in a majority of states, are state and municipal bonds if held within the state. In at least eight states, bonds of the state are exempt, but those of the municipalities are taxable, while in a few states the reverse is the case. In several states both kinds of bonds when issued after specified dates, are exempt, but in Ohio state bonds are exempt only if issued prior to 1913. All but seven of the forty-eight states, however, attempt to tax the resident holders of state and municipal bonds of other states; but the exceptional states are those in which most of the investors in this class of securities reside. In many cases private debts receivable are allowed to be offset against debts payable. In some states mortgages on real estate are exempted or (in Massachusetts) treated as an interest in the real estate. Rarely mortgages are exempted up to a certain amount (in Indiana, to $700, the purpose being to tempt the borrower to reveal the name of the lender). Sometimes a special mortgage registration tax, payable but once (in New York ½ of 1 per cent) is levied, and otherwise mortgages are free from taxation. Small as this rate is, the fiscal yield of mortgage taxation under this plan exceeds that under the general property tax.

By the overlapping of these laws, so contradictory in principle, it may happen that securities held by taxpayers residing

in other states than those of the issue are taxable two or three or more times; but few if any loans of this kind are made except by those evading all taxation.

§ 5. **A consistent policy of wealth taxation.** These exceptions still leave the law in its general principles as to the taxation of intangible property illogical and unjust. A solution can be found only by abandoning the ambiguous legal concept of property, and making use of economic concepts. A consistent tax law might take either wealth or capital as the basis of assessment, but not sometimes the one and sometimes the other. Wealth is an impersonal basis of taxation; each piece of wealth might be taxed once as a unit no matter how the ownership were divided. Or the other alternative might be chosen. Capital would be a personal basis of taxation; each person's capital might be taxed no matter from what sources the incomes were derived (the concrete wealth, of course, then being left untaxed).

The wealth basis is much nearer to the present general property tax as actually administered. The assessment of general tangible wealth would undoubtedly be more easily done than would that of individual capitals, and likewise be both easier and juster than the present inconsistent policy. Tangible things are comparatively easy to find, measure, and evaluate where they are, and if they are all taxed it is evidently the same as if all the capital values based upon them were taxed in the owners' hands. The various equitable claims of different owners in one source of income could be left to adjust themselves through shifting, mainly in the choice of investments, once the plan had become generally applied.

§ 6. **Needed reform of assessment.** The assessment of the present general property tax is notoriously inefficient and unjust. The root of most of the present evils (other than those above discussed) is the method of local election of assessors, which usually is by townships, but in some cases by counties. The local assessor's estimate of value is used as a basis for taxation not only for his district but for the larger

units (county and state). Thus every local assessor is tempted by the conflict of interests not only among the taxpayers in the district which elects him, but by the conflict of interests between his district as a whole and other districts. The lower the ratio of assessment to true valuation in any township compared with that of the other tax districts, the smaller the proportion of county and state taxes that the people of the district have to pay. Willingness to under-assess property often becomes thus the chief virtue of an assessor in the eyes of his political constituents. This has led in many cases to absurd underassessment, which boards of equalization have proved powerless to remedy in any great measure. A sounder plan would be general state assessment, with a permanent expert board of commissioners employing a corps of state assessors under the merit system of appointment. This plan has as yet been applied only to assessment of railroads and some other public-service corporations.

§ 7. **Separation of state and local taxation.** For the reason just indicated the failure of the general property tax has been most conspicuous where it is used as a basis for state taxation. This has led some financial students to advocate the plan of separation of state and local taxation. This means the assignment of certain sources of revenue (such as corporations and the liquor business) primarily or exclusively to the state, leaving all real estate and the general property of noncorporate persons to be taxed by the counties and minor divisions under the general property tax. The plan has been increasingly applied in New York, until, in 1906, it became almost complete. In 1910 the plan was adopted in California; and it is largely used in New Jersey, Connecticut, Delaware, and Pennsylvania, and to a small extent in some other states. An efficient state assessment of general wealth would accomplish most of the advantages claimed for this plan, while avoiding some of its dangers.

§ 8. **Federal taxation of merchandise and acts in commerce.** Tariff and internal revenue duties constitute the two

chief revenues of the federal government. Both of these are mainly taxes on wealth. Unlike the general property taxes they are not levied upon the main body of wealth held in possession, but almost entirely upon articles of merchandise and upon acts in course of trade. Stamps on receipts, checks, deeds, bills of sale, and licenses on the sale of liquor and tobacco are taxes on business acts which are necessary to the acquisition, use, or expenditure of wealth. Goods imported are taxed at the time of entering the country; domestic products such as cigars, spirituous or malt liquors, playing cards, and (at times) matches, pig iron, and other products, are taxed usually at the time of exit from the factory. It has already been shown that when the tariff duty prevents the importation of foreign goods and by raising the price encourages domestic manufacture of the article, there is virtually taxation of the consumer to subsidize the private manufacturer. A system of properly adjusted compensatory duties (tariffs and internal duties combined) which would prevent tariff duties from having any prohibitive effect whatever could, in a great country like ours, be made to produce any revenues desired. Such a system, combined with the federal income tax, seems destined to be the chief dependence for the national government.

§ 9. **Proposal of the single tax on land values.** Besides the general property tax there are found in the country as a whole a large number of special property taxes. Some of these have been introduced as substitutes for the general property tax; such is the special taxation (above referred to) of mortgages, and bonds. Other special property taxes have been introduced because they were believed to be good in themselves; such are special franchise taxes on corporations and some kinds of taxes on land.

The special taxation of land, or of land values, has been strongly urged by Henry George and his followers since the publication of the remarkable book "Progress and Poverty" in 1879. The doctrine there set forth is that the state should "appropriate land rent by taxation," should "tax land values,

irrespective of improvements." It is maintained that "a single tax" of this kind would be quite sufficient for all the purposes of government. The main arguments adduced for this plan may be reduced to three propositions: first, private property in land is essentially unjust, because land is made by nature, not by men; second, the plan would make assessment simple and certain by limiting it to the unimproved land, and making unnecessary the more difficult assessment both of tangible improvements and of intangible personal property; and third, it would work a marvelous reform in social conditions, abolishing poverty and greatly increasing production.

It is impossible within our limits of space to discuss this proposal further than to indicate that: (1) It assumes an untenable theory of property.[4] (2) It overlooks the difficulty of distinguishing the value of the land "irrespective of improvements," from that of the land as it actually is, a difficulty especially great in the case of agricultural land.[5] The difficulty is present even in the case of urban land when the improvements of filling, draining, and leveling have become incorporated with the site.[6] (3) The plan ignores the stimulus (motivating force) which private ownership has given and still gives to the maintenance and fuller productive use of land. Nowhere has production thriven where the state was the universal landlord.

§ 10. **Various reforms in land taxation.** While the single tax plan is defective in principle, its wide discussion has served to direct attention toward the need of reform in the taxation of land. Some proposals looking toward this end are widely favored by opponents as well as by advocates of the single tax. Such are the following:

(a) The abandonment of the taxation of mortgages.[7]

(b) A more correct assessment, in accordance with the pres-

[4] See above, ch. 2.

[5] See Vol. I, pp. 116, 117, 145, 445–455.

[6] See Vol. I, pp. 117, 146, 453.

[7] See above, sec. 4.

ent laws, of lots and lands held for speculative purposes, which in practice are now greatly under-assessed.

(c) More adequate special franchise taxation upon corporations for special privileges in the public highways.

(d) Exemption, in value equal to the costs, of improvements on land, such as buildings, drains, fences, and fertilizers, for a limited time after they are made, perhaps five years.

(e) The separate assessment of urban lands used as mere building sites and of the buildings on them.

(f) Taxation of the increase ("increment") of urban land values, periodically or on the occasion of transfer of ownership.

§ 11. **Difficulties in taxing corporations.**[8] Until near the second quarter of the nineteenth century, business corporations (of which there were few) were taxed just as was the general property of individuals. This still continues to be the case in the main in most of the states. The methods and machinery of assessment were (and still are) essentially local and simple, and have proved to be inadequate to reach or justly assess the larger and more complex corporate enterprises when their equipment and business extend beyond town, then county and, finally, state lines. Moreover, the corporate forms of organization presented in complex and puzzling forms the dual conception of property.[9] Here was the tangible wealth of the corporation and there were the diffused rights of ownership, the capital of individual stockholders and bondholders. Confused by this ambiguity, the men of that time believed (as many still believe) that there were here two separate and justly taxable funds of value. The popular will declared (and still declares) that "all kinds of property ought to bear their fair share of the burdens of taxation." Yet to apply this principle

[8] No reference is made in what follows to fees payable but once for the incorporation of new companies or at times of increasing the capital stock of an old one, variously called taxes on corporate charters, license taxes, incorporation fees, organization fees, and charter fees.

[9] See above, sec. 3.

would obviously be double taxation and result in confiscation in many cases. Between this doubt and the practical difficulty of assessment, it turned out that corporate wealth, far from being doubly taxed, was largely escaping even its due single burden.

§ 12. **Special taxes on banks.** Attempts to deal with the difficulty without clear perception of its cause took the form of legislative tinkering and patching. Taxes were gathered from corporations by any device that seemed workable. The banks, being the earlier important corporations, were first experimented upon. Taxes on capital stock and on circulation were tried first (in 1805, by Georgia), then a tax on dividends (in 1814, in Pennsylvania, and in 1815 in Ohio), examples which were followed or modified by a number of states. After the national banking system was started in 1864, attempts to tax both the capital of the banks and the stock in the hands of individuals led to federal court decisions and then to state legislation by which now in many of the states the banks are separately taxed on their real estate and the shares are assessed to the individual holders (by various rules), but the taxes deducted from dividends and paid by the bank. There are, besides, special franchise taxes and fees paid by banks in various states.

§ 13. **Special taxes on insurance companies.** Insurance companies present in a striking manner the complexities of the ambiguous property concept. The assets of the insurance companies (we refer here particularly to the reserve companies), which belong in equity to the policy holders (less the claim of the stockholders in the case of the stock companies), are nearly all invested in stocks and bonds of corporations and in mortgages on real estate. Now under the general property tax, strictly interpreted, the policies are assessable at their surrender or reserve valuation in the hands of the policy holders; secondly, the securities and credits which compose the assets are assessable to the company; and, thirdly, the railroads, factories, and houses, built with the outstanding loans

made by the insurance companies, are assessable as tangible wealth, to the owners. If such an interpretation were practically enforced it would result in triple taxation to be drawn from the same economic source, and would be utterly prohibitive of the insurance business. The enforcement has, however, been impossible in practice. Insurance companies have comparatively little tangible wealth excepting real estate for offices. This is taxed locally. Several methods have been tried (beginning as early as 1824) to make insurance companies pay taxes (usually for state purposes) on something besides tangible wealth. A tax on receipts from premiums proved most workable, first as applied to "foreign corporations" (that is, to those of other states) and later, generally, to domestic companies also. Now, amid bewildering variety and interstate rivalries in tax laws, the most usual rate is two per cent on gross (in a few cases on net) premiums collected. The taxes on premiums, with various licenses and fees, now amount to 2.15 per cent of the total receipts from life insurance premiums in the United States. This is taxation not on an existing body of accumulated wealth, but upon the process of accumulation, a tax directly on the act of saving. A consistent policy of wealth taxation combined with income taxation would require the abandonment of the present forms of special insurance taxes.

§ 14. **Special taxes on transportation.** Another great group of businesses whose taxation has been especially complex, because they are distributed throughout different taxing districts, are agencies of transportation and communication, especially railroad, sleeping car, express, telegraph, and telephone companies. A state tax on railroad tonnage (Pennsylvania, 1860) was declared unconstitutional by the United States Supreme Court. But many other plans have been tried to compel the railroads to contribute, the chief being by taxes on dividends, gross earnings, equipment, and valuation of capital stock, taxed either to the company or to the stock-

holders, (Connecticut since 1849). About a third of the states no longer make the physical plant the basis of taxation, except that in most of them some part or kinds of real estate are taxed locally.[10]

Telegraph companies are still locally assessed in most states, but in over a third of the states are taxed either on gross receipts, or on mileage of wire. Telephone companies are similarly taxed, but sometimes on the number of transmitters, or of subscribers, or on each plant, or otherwise. In a similar manner, express and sleeping car companies are taxed, in the same group of states, on mileage, or on capital stock proportional to mileage, or by license and privilege taxes.

In the case of these corporations, and also of various other miscellaneous kinds of companies, no clear-cut principles serve to guide. The result is "a chaos in practice—a complete absence of principle."[11]

§ 15. **Alternative policies as to corporate taxation.** If the taxation of corporations is not to continue to be treated in a mere hit-or-miss manner, with every possible kind of inconsistency among the various states, some general principles must be recognized and some clear policy be formulated. But there is no general agreement to-day among jurists and economists upon a definite and consistent plan in this matter.

Two alternative policies appear. The first is to make the scheme for taxing corporations quite different in principle and plan from that for taxing natural persons. The assumption in this is that the "general property tax" is an irremediable failure, and is particularly inapplicable to corporations. This plan goes along with the separation of state and local taxation.[12] An unfortunate result of this is to relieve the great mass of taxpayers of the state from any apparent and measurable part of the tax burden for state purposes and

[10] E. R. A. Seligman, "Essays on Taxation" (1895), p. 156.

[11] Seligman, op. cit. p. 136.

[12] See above, sec. 7.

thus to separate responsibility and power in state government. This policy nevertheless is favored by some of the leading authorities on finance.

The other policy is to tax the wealth and business of corporations (excepting those enjoying special privileges) in essentially the same way as other wealth and business. The improvement of corporate taxation would thus be but a part of the transformation of the "general property tax" into a general tax on tangible wealth.[13] If first there is recognized the error of assessing the equitable ownership interests in addition to the body of wealth, and secondly there is created an efficient agency of assessment, the taxation of corporations can be logically and easily brought into accord with a harmonious system of state and local taxation.[14]

§ 16. **General plan for corporate taxation.** The main features in such a plan of reform would be as follows:

(a) Assessment of all wealth by a state agency, with expert nonlocal assessors, appointed and serving only under the merit system.

(b) The assessment of the value of each enterprise and body of wealth as a unit for the whole state, and apportioned to the minor divisions as the basis for levying local taxes.

(c) Apportionment of the total value in the state among the localities by general rule, in the case of transportation and transmission companies, by mileage with due regard to the presence of local real estate and of special industrial equipment such as repair shops and power plants.

(d) Taxation of interstate enterprises only in due proportion to the whole business, by mileage or other rules; interstate comity to be further developed in this matter.

[13] See above, sec. 5.

[14] The assessment feature of this proposal is exemplified more nearly than anywhere else, tho still imperfectly, in the "Indiana plan," in which, however, the true concept of property is recognized only in so far as the shares of corporations of which all the wealth is taxed are not assessed to the shareholders.

(e) Account to be taken, in assessment, of various factors determining the earning power, such as good will, patents, and other monopolistic elements, pertaining to and helping to determine the value of the tangible plant of the enterprise.

(f) Account to be taken of the market value of securities and notes owned by a corporation, in determining the taxable value of the whole business, but these not to be treated as a separately assessable "property" (in addition to the tangible plant).

(g) Exemption of the holders of securities and evidences of indebtedness of corporations.[15]

(h) Treatment of special privileges granted to public-service corporations for the use of streets and public highways on the principle of rent-payment to the community rather than by levying a percentage on an assessment.

[15] This need not prevent a supplementary system of graduated taxation on incomes. See below, ch. 18, sec. 10.

CHAPTER 18

PERSONAL TAXES

§ 1. Inheritance tax laws. § 2. Fiscal importance of inheritance taxes. § 3. Income taxes; general nature. § 4. Income taxation by the states. § 5. History of federal income taxation. § 6. Events leading up to the law of 1913. § 7. Main features of the law. § 8. Exemptions and stoppage at source. § 9. The graduation principle. § 10. A system of taxation.

§ 1. **Inheritance tax laws.** There remain to be considered at least two important forms of taxation that are essentially *personal* in their unit of assessment, in contrast with the foregoing which are (or should be, if consistent) essentially *impersonal*.[1] These are the inheritance and the income taxes.

Until 1916 little use had been made of inheritance taxation for federal purposes. In that year, however, Congress passed a law which was expected to obtain about $20,000,000 a year from inheritances.

Forty-one states in America have inheritance tax laws (in 1915) which apply generally to property passing either by will or under the intestate laws of the state. The tax is for state purposes. These laws differ in many ways, but are nearly all alike in certain respects:

(1) In applying to the separate legacies rather than to the estate as a whole.[2]

(2) In taxing legacies to relatives in the direct line at a lower rate (or even exempting them entirely) than those to collateral relatives.[3]

[1] See above, ch. 17, sec. 3, note, and sec. 5, on this distinction. The poll tax also is personal; see ch. 16, sec. 9.

[2] In Utah the tax is 5 per cent on all estates over $10,000.

[3] Exception, Utah.

(3) In exempting legacies below a certain amount.[4]

(4) In having rates progressing with the size of the legacy; (this feature is less general, but is prominent in most of the later laws).

§ 2. **Fiscal importance of inheritance taxes.** The fiscal importance of inheritance taxes has been comparatively not very great (except in New York State), but it has rapidly grown. In 1903 the receipts from this source (in 27 states) were over $7,000,000; in 1913 they were (in 35 states) $26,000,000. The spread of inheritance taxes and the higher and progressive rates applied are an expression in part of the need of additional revenues and in part of the growing popular concern regarding the concentration of wealth. Yet the actual legislation is something of a compromise between fiscal policy (to get revenues) and social policy (to reduce or to distribute the larger fortunes.[5] In New York legacies of over $1,000,000 are now taxable at 4 per cent to relatives in the direct line and to all others at 8 per cent. In Washington the tax to relatives in the direct line is but 1 per cent, but to others it may go as high as 12 per cent on legacies over $100,000. In Wisconsin, somewhat similarly, the tax may rise to 15 per cent on the excess above $500,000.

§ 3. **Income taxes; general nature.** All taxes, whether assessed upon the capital value of goods or not, come out of (reduce) the incomes now or later available for individuals. But there are various ways of attacking incomes, i.e., of apportioning the tax burden. Income taxation is that form in which the basis of the assessment and levy is the income of the taxpayer as it arises (not accumulated wealth, or capital, or business processes, or expenditures). Of the various conceptions of income [6] the one mainly employed in income taxation

[4] Exceptions are Missouri, New Hampshire, Vermont, Virginia.

[5] It would be more consistent with the purpose of equalizing fortunes to vary the rate not according to the size of the legacy but according to the size of the fortune which the legatee has, or would have, after receiving the legacy.

[6] See Vol. I, p. 26.

is monetary income arising in the course of business, supplemented occasionally (but not consistently) by some items of material income that are expected to come to the person. There is not in the long run such a contrast between wealth taxation and income taxation in their ultimate burden and effect as is usually supposed.

Indeed wealth (or capital) taxation as applied to accumulated wealth is more far-reaching than income taxation, for it falls upon the present worth alike of monetary and of psychic incomes (e.g., the value of a house whether it is let to a tenant or occupied by the owner). But, on the other hand, income taxation attacks directly the monetary incomes from labor, coming as wages, salaries, fees, and profits in business. This feature goes naturally with the fact that the income tax is essentially a personal tax, grouping the items of assessment about a person, whereas the "property" taxes are mainly (tho not consistently) impersonal, making the piece of wealth the primary object of assessment. This summation of each person's income makes income taxation peculiarly suitable for progressive taxation with the social-welfare motive of equalizing the distribution of wealth. It is doubtless this technical assessment feature, rather than any essential advantage as a mode of taxation, that has led to its recent growth in popular favor.

§ 4. **Income taxation by the states.** Income taxes have been used widely in European countries, but not so much in the United States. Numerous attempts have been made by the states to tax incomes, but with small results. Personal incomes, when sought by local assessors, proved to be most elusive. There are (in 1913) but seven states with anything resembling a personal income tax.[7] These are Virginia, North Carolina, South Carolina, Mississippi, Oklahoma, Mas-

[7] In addition, certain items of receipts of companies or incomes of individuals are arbitrarily defined as property for purposes of taxation in a few cases in about fifteen other states. See Wealth, Debt, and Taxation, Report of the Bureau of the Census, 1907, p. 622.

sachusetts, and Wisconsin. Of these states Wisconsin has the most recent law, and one the widest in its application and the most important fiscally. The law applies a progressive rate to all incomes (with exemption of $700 from wages and salaries) and contains elaborate provisions for corporate taxation. The proceeds are distributed 10 per cent to the state, 20 per cent to the county, and 70 per cent to the municipality in which the tax is collected. In the six other states the tax is on incomes only exceeding a certain amount (North Carolina, $1000, the other states from $2000 to $3500 exemption); some apply to incomes from any source but others do not apply to incomes from property otherwise taxed. The total receipts from these state income taxes in 1913 were but $314,000.

§ 5. **History of federal income taxation.** The income tax seems destined to play a more important part in the fiscal system of the federal government. Until 1913, however, its part had been small. It began to be used under the law of 1867 (when the law passed in 1861 was replaced before it went into effect). This was repeatedly amended and finally repealed in 1870, to continue in force until the year 1872. The rate was 3 per cent on the excess of incomes over $600, and 5 per cent on the excess over $10,000. This law was repeatedly upheld by the United States Supreme Court as not in conflict with the Constitution. Its fiscal results were not large, as it was never effectively administered.

The next income tax law was that of 1894, enacted in connection with the tariff revision of that year. It was declared unconstitutional before it had gone into effect. The main ground for the decision was that a tax on incomes from rent of land as well as on incomes from personal property is direct, and must therefore be apportioned among the states according to population.

In the active discussion of social legislation in the years following this decision public sentiment developed favoring a renewed attempt to get such legislation by amending the Consti-

tution. This was shown by the remarkable fact that a bill for the sixteenth amendment to the Constitution was passed unanimously by the Senate, and almost unanimously by the House. It was ratified by three-fourths of the states and became a law in 1913.[8]

§ 6. **Events leading up to the law of 1913.** Meantime, in 1909 and excise tax law had been passed, applying to corporations in a manner not open to the objections found by the Supreme Court to the law of 1894. The Democratic party, which had passed the law of 1894, was pledged to the passage of an income tax law when it came into power again in 1913. The reduction of the tariff, as well as growing expenditures, moreover, made necessary the development of new sources of revenue for the national government. In other countries the income tax had been found to be a part of a system of taxation especially valuable as "a balance wheel" to equalize the revenues and expenditures. It was deemed by some to be an additional advantage of an income tax that it would make the richer citizens better realize the nature and burden of public expenditure. Most other federal revenues, being derived from the tariff and from taxes on merchandise, are borne mainly by the purchasers and consumers.

An income tax was opposed as sectional taxation by many in the Eastern states where the owners of most of the larger fortunes reside. But to this Senator Elihu Root replied that the states where there was the greatest ownership of wealth pay the largest taxation under any scheme, and ought to.

§ 7. **Main features of the law.** The law as enacted[9] imposes (a) a "normal" tax of 1 per cent on the entire net income of every corporation (engaged in business for profit);

[8] Article XVI. The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several states, and without regard to any census enumeration.

[9] It constitutes sec. 2 of the tariff act of 1913 entitled "An act to reduce tariff duties and to provide revenue for the government and for other purposes."

(b) a "normal" tax of 1 per cent on the excess above $3000 of every unmarried individual's income (or $4000 for husband and wife, as indicated in the next section); (c) an "additional tax" (often called a super-tax) ranging from 1 to 6 per cent on individual incomes of larger amounts than $20,000. There are thus eight classes of persons, those entirely exempt, those paying only at the normal tax rate, and six different classes paying a super-tax.[10]

A person with an income of $1,000,000 thus pays $60,020, this being the amount indicated, $25,020 for the first half million plus 7 per cent on the second half million.

§ 8. **Exemptions and stoppage at source.** There are various exemptions, the first being that of $3000 on every individual income and of $4000 on the aggregate income of husband and wife living together.[11] Among other exceptions are sums paid for taxes (except assessments for local benefits), necessary business expenses, losses sustained, and (for the normal tax only) those parts of individual incomes derived from corporations which have paid the tax on them.

The difficulty of getting an honest and complete assessment of incomes is great. All taxation is deemed by the taxpayer to be "inquisitorial" in some degree, and this is particularly true of an income tax. In England had been developed the

[10] This may be seen in the following table:

Income limits	*Normal tax on lower limit*	*Rate on excess in next class*		*Total tax on upper limit*	*Total rate per cent.*
		Normal	*Additional*		
Under $3,000	0	0	0	0	0.00 to 0.00
$3,000–$20,000	0	1	0	$ 170	0.00 to 0.85
$20,000–$50,000 ....$	170	1	1	770	0.85 to 1.54
$50,000–$75,000	770	1	2	1,520	1.54 to 2.02
$75,000–$100,000 ...	1,520	1	3	2,520	2.02 to 2.52
$100,000–$250,000 ..	2,520	1	4	10,020	2.52 to 4.00
$250,000–$500,000 ..	10,020	1	5	25,020	4.00 to 5.00
In excess of $500,000	25,020	1	6	upwards	5.00 to 7.00

By legislation in the summer of 1916, after the foregoing was in type, the "normal" rate was doubled and the additional rates were raised.

[11] The exemption is $3000 for each if they are not living together. Thus the law offers a reward of $20 to make marriage a failure.

plan called "stoppage at source." In our law the taxation of corporations at the rate of the normal tax, while requiring them to report the names of those receiving dividends and interest payments, affords an ingenious way of checking up the returns of individuals in respect to a class of investments which is steadily increasing in importance.

§ 9. **The graduation principle.** The most disputed feature of the income tax is the principle of graduation, or of progression. It is upheld in part because in this case it but offsets *regression*, that is relatively heavier taxation on the smaller incomes, in the case of the other kinds of taxes (tariff, property taxes, etc.). It is urged further that those of larger incomes, especially the largest, have marked advantages over others in making investments. Further it is urged that the higher the income the less does a certain rate cut into "the amount necessary for good living" (as was said in Congressional debate). This is in accord with the psychological principles of choice, of value, and of diminishing gratification. Finally, there is a widespread approval of the progressive rate just because it in so far acts as a leveling influence upon fortunes. The "additional" tax is already important fiscally, yielding over one-half of the total paid by individuals and one-fourth of the total from corporations and individuals.

The income tax returns for the first ten months of the law (March to December, 1913) showed 356,598 taxable individual incomes, equal to about 1 per cent of the taxable population (considering minors to be usually not taxable). Even this proportion, small as it is, is much larger than that of the European countries having a general income tax.

The first ten months' yield (March 1, 1913, to December 31, 1913) was over $60,000,000. A remarkable fact is that 21 per cent of all taxable incomes (not persons) were in the single Borough of Manhattan (the main part of New York City). The receipts from the income tax in 1913 were nearly

10 per cent of the ordinary receipts of the federal government, and about 2 per cent of total revenue receipts of all branches of government, the income taxes paid by individuals being about 1 per cent of the same total, and the super-tax about ½ per cent of the same.

The receipts from the income tax during the fiscal year ending June 30, 1915, were $80,000,000, of which $39,000,000 was paid by corporations and $41,000,000 by individuals. Of the latter sum, over $24,000,000 was from the super-tax.

§ 10. **A system of taxation.** The task of reforming and developing the various kinds of taxes and of uniting them into a just and consistent plan for each of the divisions of government in the United States is a vast and difficult one. There are many conflicting interests among states, between states and nation, among the various minor political divisions, and among individuals and classes. There are also conflicting opinions regarding many features of the possible practical plans. Because of these it is safe to predict that progress will not be made quickly, steadily, nor always directed toward a clear ideal. If progress is to be rapid, the public must, however, have consistent principles by which its steps may be guided. In the foregoing kinds of taxation are the various elements which may be united into a system of taxation. It is useful to consider how this might be done.

At the basis of the whole tax structure is taxation, by value, of concrete wealth at the place where it is situated (*in situ*). This should be regardless of the distribution of ownership or of the residence of the owner. The present misnamed "general property tax" already presents the main outlines of this form of taxation and the general changes necessary in law and method of assessment have been indicated above.[12] Corporation taxation may be adjusted to this either by separate treatment and assignment to state purposes only, or more simply for most states, by assimilating it with the general taxa-

[12] See above, ch. 17, sec. 5.

tion of wealth and allotting due shares of the proceeds to the various taxing divisions.[13] The national government can, because of its exclusive power of levying tariff duties and also because of its exclusive control over interstate commerce, reach the tax-paying ability of the nation effectively by a combination of tariff and internal revenue taxes. These become a part of business costs, and are diffused over the whole population in general prices.[14]

This system of impersonal wealth taxation may then be supplemented by personal taxation, applied through inheritance and income taxes. These forms of taxation extend over and reach many of the same persons and incomes as do ultimately the impersonal taxes. But the summation of personal incomes gives the necessary condition for applying the principle of progression so far as this is, by public opinion, deemed desirable either for fiscal or for social reasons.

[13] See above, ch. 17, secs. 15, 16.

[14] See above, ch. 15, sec. 14, first paragraph.

PART V

PROBLEMS OF THE WAGE SYSTEM

CHAPTER 19

METHODS OF INDUSTRIAL REMUNERATION

§ 1. Workers subordinate in early societies. § 2. Workers in the Middle Ages. § 3. Growth of the wage system. § 4. Practicability of the wage system. § 5. Time work. § 6. Task work. § 7. Piece work. § 8. Premium plans. § 9. Aim of profit-sharing. § 10. Examples of profit-sharing. § 11. Difficulties in profit-sharing. § 12. Defective theory of profit-sharing. § 13. Purpose of producers' coöperation. § 14. Limited success of the plan. § 15. Its main difficulty.

§ 1. **Workers subordinate in early societies.** As far back as the history of settled and populous communities can be traced, the masses of workers have been subordinate. Civilization began with direction, with obedience to superiors on the part of the mass of men. Even in the rudest tribes, the women and children were subject to the will of the stronger, the head of the family. Among the Aryan races the family system was widened, and the patriarch of the tribe secured personal obedience and economic services from all members of the community. Chattel slavery, the typical form of industrial organization in early tropical civilization, seems to have been one of the necessary steps to progress from rude conditions; students to-day incline to view it as an essential stage in the history of the race. But as conditions changed with industrial development, chattel slavery became an inefficient form of industrial organization and a hindrance to progress.

§ 2. **Workers in the Middle Ages.** Serfdom for rural labor and many limitations on the workman's freedom in the towns were the prevailing conditions in medieval Europe. Serfdom was both a political and an economic relation. The serf was bound to the soil; the lord could command and con-

trol him; but the serf's obligations were pretty well defined. He had to give services, but in return for them he got something definite in the form of protection and the use of land. Between the lord and the serf there continued an implied contract, which passed by inheritance from father to son, in the case both of the master and of the serf. In the towns conditions were better for the free master class of the artisans who owned their tools and often a little shop where they both made and sold their products. But the mass of the workers, shut out from special privileges, bore a heavy burden. There were strict rules of apprenticeship; gild regulations forbidding the free choice of a trade or a residence; laws against migration into the town; settlement laws making it impossible for poor men to remove from one place to another; arbitrary regulation of wages, either by the gilds in the towns or by national councils and parliaments, forbidding the workmen to take the competitive wages that economic conditions would have forced the employers to pay; combination laws forbidding laborers to combine in their own interest. These conditions prevailed even in the periods and in the countries often referred to as particularly favorable for the working classes (such as England in the fifteenth century).

§ 3. **Growth of the wage system.** Throughout the Middle Ages these conditions were gradually changing, and the changes were hastened by the discovery of America, by the social unrest accompanying the Reformation, and by other forces. Servile dues in the rural districts were, by the sixteenth century, commuted for cash payments in England and had begun to disappear in the other Western countries of Europe. The agricultural work was done partly by the peasant landowners, partly by yeomen farmers on their own land, and partly by laborers hired by landowners or by tenant farmers (enterprisers with some capital for equipment). The growth of commerce and of the mechanical trades in the towns required larger ships, factories, and shops, and increasing investments. This required in the towns an increasing

proportion of hired laborers having little or no capital invested in industry, and living on wages. This change went on more and more rapidly with the introduction of machinery in the eighteenth and nineteenth centuries, and "the wage system" grew steadily to be a more and more important part of the whole economic structure.[1]

§ 4. **Practicability of the wage system.** This change has brought with it grave problems of social organization and social welfare, which it is not the place here to discuss. But whatever be the difficulties of the wage system it has certain practical merits of workableness which account for its progress and dominance.[2] The larger the market and the longer the waiting period in industry, the greater the element of uncertainty and financial risk. Under the wage contract the employer, as the one best prepared to do it, takes the risk as to the future selling price of the product; the worker gets in a definite sum at once the market value of his services. Wage payment, therefore, is a form of insurance to the workingman; he gets something definite instead of taking chances he is ill prepared to take. Wage payment is a form of credit to the laborer whose labor is applied to producing the goods for customers distant in time and in place. The employer advances to the workman the present value of the future sale, discounting it at the prevailing rate of interest.

Wage payment implies a contract by which the employee on his part agrees to render service and the employer on his part agrees to pay for it. The methods of determining and measuring the amount of service of the employee are called "methods of industrial remuneration." The many varieties may be grouped in two classes: time payment and piece payment, corresponding with the two modes of measuring labor, time work and piece work.

§ 5. **Time work.** Time work came first and was long almost the only method. In time work the employee is paid by

[1] See Vol. I, pp. 227, 318, 322; also above, ch. 2, sec. 14.

[2] See e.g., Vol. I, p. 329, on selection of managed and of managers.

the hour, day, week, month, or year, as the case may be. This is very satisfactory for small enterprises, where the master works with his own hands alongside of the employee, overseeing him, teaching him, and stimulating him by his own presence and example of industry. This method prevails still in nearly all farming work, in many kinds of manufacturing, in most transportation, in clerical positions in trade, and in general where the employee must perform a variety of tasks.

Considering a brief period, it might seem that in time work the worker is paid by time regardless of his effort or performance. However, in every industry there is a recognized, fairly definite standard of accomplishment for those getting the regular market rates of wages, so that the time-standard implies some performance- or piece-standard also. But this is judged by the employer only in a general way, and very commonly men of different degrees of efficiency continue for some time to receive the same money wage. Still, where any differences become noticeable to the employer in quantity of work, quality of work, or personal qualities of honesty, reliability, and good temper, the better workman is likely to obtain a better position, higher pay, more regular employment, or some other form of reward. The employer is more likely at the end of any period of employment, to discharge the man who falls short either in quantity or quality of work, and to retain and advance the better worker. The method of time-payment does not directly tempt the workman to slight the quality of his work by haste. It does not keep constantly before the worker the thought of his own interest in rapid work, often with an accompanying nervous and mental strain. In most occupations, therefore, the workers prefer time work. In does not take exclusive account of the quantity of material product, but leaves place for estimating various personal qualities of the employee which are of value in a business.

§ 6. **Task work.** There are thus both advantages and disadvantages in time work, and their relative importance varies in different industries and industrial conditions. Especially

is the difficulty of supervising workers and of ensuring the performance of a certain standard, or minimum, amount and quality of work great in larger enterprises. Various methods of measuring the performance of the worker directly by some other than the time-standards have been developed. All of these, in a general way, involve the piece work principle.

Task work is nominally time work, with a penalty if a certain amount of product is not turned out within a given period. The agreement may be that if the specified task is not done within the regular time, it must be completed in overtime without additional pay. This is also called "doing a stint." This method has been extensively used in the ready-made clothing business in America, and is to some extent involved in many cases of wage payment in manufacturing.

§ 7. **Piece work.** Piece work of the simpler, or ordinary kind, is that where the payment varies just according to the amount of the product, by some physical measurement, as yards of cloth woven, number of pieces turned on a lathe, or amount of type set by a printer. Usually careful inspection by some agent of the employer serves to keep the quality up to a certain standard. The rejected pieces are not paid for, and sometimes also the workmen are required to pay for the materials wasted by their poor work. Piece payment is convenient for home work, such as that of rural peasants weaving cloth for commission merchants or as that of tenement workers in cities. It is also employed very widely in the larger factories in textile and mechanical industries. Selling on commission is a form of piece work.

In piece work the motive to activity is ever present to the worker, and almost always the worker turns out a larger product when paid by the piece than when paid by time. The employer benefits by the more efficient use of his machinery and equipment even when the price per piece is not reduced with the larger output per worker. The worker's earnings may increase rapidly under this plan, but as the manual dex-

terity acquired is usually of a very special kind which can be used only on one particular machine, the worker has little opportunity to resist a cut in his wages. For this reason and because of the undue strain upon the worker that often occurs, piece work is in many trades not favored by the workers.[3]

§ 8. **Premium plans.** Various modifications of piece work have been developed of late, all involving the features of a minimum task and of a premium for performance beyond that point. These plans are called "premium plans," "progressive wage systems," and "gain sharing." One of the first of these, Halsey's premium plan, fixes a standard time for a job and if the worker falls short of, or merely attains to, that standard he gets the regular pay; but if he takes less than the standard time he receives a fixed premium per hour for the time saved. For example, if the standard time is 10 hours for a $3.00 job and the premium for speed is ten cents per hour, the worker would receive 20 cents premium if he did the work in 8 hours ($2.40 + 20, total $2.60), and 50 cents premium if he did it in 5 hours ($1.50 + 50, total $2.00). His average wage per hour thus rises as his speed increases; it becomes 32.5 cents per hour when the job is done in 8 hours, and 40 cents per hour when the job is done in 5 hours. The reduction of cost per job to the employer evidently would be 40 cents in the first case, and $1.00 in the second. This is Halsey's plan, by which the worker gets one-third and the employer two-thirds of the time saved.

The same plan has been applied (Weir's method) with a premium that equally divides between the workman and the employer the time saved. By Rowan's method the premium is not a fixed sum but a percentage of the standard rate per hour equal to the percentage of reduction in time consumed. For example, if in the foregoing example the time were reduced 20 per cent (to 8 hours) the premium would be 20 per cent of 30 cents, and the workman would receive 36 cents per hour. By this plan the premium becomes less for the

[3] See below, ch. 20, sec. 6.

later reductions than in either of the other plans. The utmost possible wages would be double the standard rate.

A number of other variations have been worked out by the promoters of recent scientific management, and are known as Taylor's, Gantt's, and Emerson's plans. The authors of all these plans agree as to the importance of fixing the standard rate so that it will leave a possibility of considerable improvement with unusual effort, and of leaving the standard rate and premium unchanged as long as no new process or new machinery is introduced into the business. If this is not done the employees lose faith in the plan and refuse to make the necessary effort to earn the premium. Most of these plans of payment recently have been connected with experiments and studies in scientific management to reduce the time and increase the ease of the operations.

In a variety of ways a bonus or a premium may be paid for quality, or for economy in the use of materials (as to a fireman for using less coal), or for various other results. Every business has its peculiar conditions, which make certain results especially desirable, and certain methods of reward practicable. In some industries, for example, the various plans of piece work and of premium payment are applied to groups of workers (as in collective piece work), the total payment being then divided among the members of the group in some agreed proportion.

§ 9. **Aim of profit-sharing.** Profit-sharing is rewarding the laborer with a share of the profits in addition to his usual contract wages. Payments by the piece and premiums for output are solely dependent on the efforts of the particular workman (or collective group), but in the plan of profit-sharing a premium is given in addition to the regular wage if, at the end of the year, the business as a whole has yielded a profit above a certain amount. Profit-sharing is not merely a gift; it is done usually in accordance with a definite promise in advance. The employer adopting the plan does not intend to lose by it. His purpose is to stimulate the in-

dustry of the workers, thus reducing waste and cost of labor and supervision, and thereby increasing profits. He offers to divide with the workman the additional profits which are expected to result from their efforts. There is, in every factory, greater or less waste of materials, destruction of tools, and loss of time, that no rules or penalties can prevent. If the worker can be made to take a strong enough personal interest he will use care when the eye of the foreman is not upon him. The product also can be slightly increased in many ways by the workman's exertions or suggestions. In some cases the quality of the work cannot be insured by the closest inspection as well as it can be by a small degree of personal interest. Either responsibility for the fault cannot be fixed, or the defect is one not measurable by any easily applied standard. Strikes may be averted, good feeling promoted, and contentment furthered if the interest of the worker can be made to approach, and in large measure to become in harmony with, that of the employer. The economic result of the plan, if it can be made to work, should be to reduce the costs of these establishments below what they are. The crucial question is whether profit-sharing alone in any particular case will insure that the costs will be less than those of competitors, thus giving a source out of which an increased amount, really a wage, can be paid to the laborer. For the amount of profits is affected not only by the amount of output, but also by a number of other things that are quite outside the control of the workmen.

§ 10. **Examples of profit-sharing.** The profit-sharing plan seems first to have been successfully tried in Paris, in 1842, by Leclaire, a house-painter. In house-painting there is often a great waste of materials and time by men working singly or in small groups in different parts of the city. By this new method Leclaire enlisted the aid of the workmen, reduced the costs, and increased the profits. It is a remarkable fact that the plan has been continued successfully by the same firm to the present time. It has been tried in many

hundreds, possibly thousands, of cases, and is operating in some form or another in more than a hundred firms in Europe and America. The most notable examples of profit-sharing in the United States are the Pillsbury Mills in Minneapolis, Procter and Gamble's soap-factories, in Ivorydale, Ohio, the Nelson Mfg. Co., in Leclaire, Ill., and the Ford Automobile Works, in Detroit. In some cases both manufacturer and workmen value the system highly. It probably has its greatest success when applied in prosperous establishments where profits are regular and large, and where a steady working force is especially desired. The proportion of business done in this way is not large. One hundred firms is a very small fraction of 1 per cent of the total number of firms in Germany, France, England, and America. A still more important fact is that true profit-sharing has spread little since 1890, tho various practices have developed under that name. The most noteworthy of these is the selling of stock, usually at a somewhat lower price, to the employees of a corporation so that, as stockholders, they may have a motive to work for the success of the company (e.g., the United States Steel Corporation). This method as applied to a select few of the employees, who are advanced to official positions in a corporation, is very widely adopted.

§ 11. **Difficulties in profit-sharing.** It seems at first difficult to explain this comparative failure of a plan that looks so attractive in spirit and of which so much was hoped. Yet objections come from the side both of the workman and of the employer. The workman lacks knowledge of the business and is suspicious of the bookkeeping. If at the end of the year the books show no profits, the workman loses confidence, considers the plan to be mere deception, and rejects it. The working of the plan remains in the employer's hands, and the workman really is not a partner in the business. Moreover, the plan puts a limitation upon the workman's freedom to compete for better wages by changing his place of work. It is indispensable to make length of service in some degree a

condition to the sharing of profits. Workmen, coming and going, cannot be allowed to share; the percentage given to the others increases with length of employment. Whenever men are thus practically subject to a fine (equal to the amount of shared profits) if they accept a better position, there is danger of a covert lowering of wages. The plan tends to break up the trade-unions, which is one of the reasons that the employers like it, and is the main reason that organized labor opposes it.

The employer on his part objects to the interference with his management, the troublesome inspection of the books, and the constant complaints of the workmen. He dislikes to have the profits known; if they are large, the advertisement of success invites competition; if they are small, publicity may injure credit and depress the value of the enterprise. In view of all these difficulties it is not surprising that while the plan often starts promisingly, it usually fails after a short trial. Business methods are severely subject to the principle of the survival of the fittest. Through competition and the survival of the firms that adopt improvements, better methods must eventually supplant poorer ones. If a method fails to spread when it has been tried for seventy-five years and all are free to adopt it, the strong probability is that it has serious defects inherent in it.

§ 12. **Defective theory of profit-sharing.** It is usually better to make wages depend on the worker's efficiency rather than on the profits of the whole business. The strongest motive to efficiency is present when reward is connected immediately and directly with effort, not with some result only slightly under the worker's control. Any change in the amount of profits is only partially and indirectly related to increased effort of the worker. The "profits" may be nothing, tho all the manual workers may be exerting themselves to the utmost. The wage bill is but one of the groups of costs. Profits are the net result of many influences. Chief among these is the skill in planning and conducting the business.

This function of management is either performed by the same person that is carrying the financial risk, or by some salaried employee selected by him. It is this management function the reward of which should, in theory, be made to vary with the amount of profits; and in fact such an arrangement (managerial profit-sharing, so to speak) is undoubtedly in operation in thousands of cases, but is not included in the usual conception of profit-sharing. Many salaried managers are in receipt of a share of profits and are gradually acquiring an interest in partnerships or a larger share of ownership in the enterprise for which they work. But ordinary profit-sharing is not in accord with the general trend toward the centralization of responsibility in the hands of competent managers, ensuring to the worker a definite amount in advance, as high as conditions make possible. The system of premiums, or bonus payments, for output, where it can be safeguarded against abuses, gives in most cases better results and is rapidly spreading. It is sounder in conception and works better in practice as a method of remuneration for most of the workers.

§ 13. **Purpose of producers' coöperation.** Since the early part of the nineteenth century many well-wishers of humanity have cherished high hopes that the whole wage system might gradually be replaced by the plan of producers' coöperation among workingmen. Producers' coöperation is the union of workers in a self-employing group, performing for themselves the enterpriser's function. The workers hope to get what seems to them to be a needless drain of profits into the pockets of the employer and unnecessarily high salaries to managers. To do this they must perform the enterpriser's function as to investment and risk. Collectively or through their representatives they must undertake to furnish capital and management as well as hand-work. The capital may be supplied either by the members, individually or collectively, or may be borrowed from outsiders, who are thus merely passive investors. Usually the return to capital invested by members is limited to 5 or 6 per cent, so that this part of the capital

likewise is treated as a passive investment, and all the real variable profits are distributed to the members as wages. The hope has been as in profit-sharing to increase the amount of profits through the stimulus the plan might give to the workers and by saving in friction, disputes, and strikes.

§ 14. **Limited success of the plan.** Practically the plan has been made to work in a comparatively few simple industries. The most notable example of successful coöperation in America was in the cooper-shops in Minneapolis. There were few and uniform materials, patterns, and qualities of product, few machines and much hand-labor, simple well-known processes, a simple problem of costs, a sure local market. After more than thirty years the main shop was still in operation, but with a membership of the older men and with no growth. A number of the less skilled workers receive ordinary wages. In America a few of the productive coöperative companies are found operating small factories. In England, there have been numerous successful societies, but all in small enterprises, mostly connected with agriculture. Within the whole field of industry, this method of organization makes little if any progress. Most experiments have failed and the successful ones have become or are tending to become ordinary stock companies with most of the stock in the hands of a few men. Therefore, whether losing or making money, they nearly all cease to exist as coöperative enterprises. This result has disappointed the hopes and prophecies of many well-wishers of the working classes.

§ 15. **Its main difficulty.** The main difficulty in producers' coöperation is to get and retain managerial ability of a high order. Failure to do this results in inability to maintain and keep in repair the equipment and to pay the ordinary returns to the passive investment, and financial failure follows. There is no touchstone for business talent, no way of selecting it with any certainty in advance of trial. This selection is made hard in coöperative shops by jealousies and rivalries,

and by politics among the workmen. A man selected by his fellows finds it difficult to enforce discipline. In coöperation there is occasionally developed good business ability that might have remained dormant under the wage system; some workmen showing unusual capacity cease to be handicraftsmen. But the unwillingness on the part of the workers to pay high salaries results in the loss of able managers. Having demonstrated their ability, the leaders go to competing establishments where their function is not in such bad repute, and where they are given higher salaries, or they go into business independently, being able easily to get the needed backing from passive capitalists.

Coöperative schemes thus suffer from the workers' inability to appreciate the functions of enterprise and management. Most men make a very imperfect analysis of the productive process. They see that a large part of the product does not go to the workmen; they see the gross amount going to the enterpriser, and they ignore the fact that this contains the cost of materials, interest on capital, and incidental expenses. Further, they fail to see that the investment function is an essential one. The theory of exploitation, as explaining profits, is very commonly held in a more or less vague way by workmen. With a body of intelligent and thoroughly honest workmen, keenly alive to the truth, the dangers, and the risks of the enterprise, coöperation would be possible in many industries where now it is not. Producers' coöperative schemes usually stumble into unsuspected pitfalls. When a heedless and over-confident army ventures into an enemy's country without a knowledge of its geography, without a map, and without leaders that have been tested on the field of battle, the result can easily be foreseen.

The coöperative principle has been embodied much more successfully and on a larger scale in America in the form of producers' selling organizations or of consumers' coöperative stores. As, however, both of these forms of organization have

been developed in America more largely by farmers than by wageworkers, the discussion of them may better be undertaken in connection with problems of rural organization rather than with those of labor.

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CHAPTER 20

ORGANIZED LABOR

§ 1. Changing relations between employers and wage-workers. § 2. Need of common action among wage-workers. § 3. Functions of labor organizations. § 4. Types of labor organizations. § 5. Statistics of labor organizations. § 6. Collective bargaining. § 7. Limitation of competition among workers. § 8. Strikes in labor disputes. § 9. Frequency and causes of strikes. § 10. Picketing and the boycott. § 11. Effects of organization upon general wages. § 12. Competitive aspect of organization and particular wages. § 13. Monopolistic aspect of organization and particular wages. § 14. Open vs. closed shop. § 15. Political and economic considerations. § 16. The public's view of unions. § 17. Future rôle of organization.

§ 1. **Changing relations between employers and wage-workers.** The "organization of labor," or the "labor movement," so striking a feature of the world to-day, is of comparatively recent origin. It did not begin and advance *pari passu* with the beginning and early growth of the wage-system as above briefly described.[1] In anything like its modern form the labor movement dates from the early years of the eighteenth century. Much of the largest part of its history in all countries, excepting England, is after 1860. Why was organization among the workers so long delayed after wage-payment became common, and why when it once appeared did it spread so rapidly in some directions, and why is it still limited in the main to certain fields of industry? These three questions are but one question in three forms and to answer one fully would be to answer all.

The modern trade union appeared in England shortly be-

[1] See ch. 19, secs. 1–3.

fore the industrial revolution,[2] and has extended as fast and as far as the same stage of industrial development has been attained in other countries. The effort of wage workers to organize themselves appears everywhere to result from the separation of the economic and personal interests of employers and workmen. As the control of industry became more concentrated in larger units with the advent of power machinery, the feeling of economic unity among the different ranks of industry was further weakened. The average workman had less opportunity of becoming a master, an employer. In the days of the old hand industry, master, journeyman, and apprentice worked side by side at the same bench. Almost every apprentice might hope to become some time a master, and many a one did so. To-day most wage-workers in large establishments have no hope of rising out of their positions. The mere largeness of an establishment forbids also the personal acquaintance of employer and workman. As a result of these changes, the workmen become more "class-conscious" of their position as wage-workers and the employers in many establishments take the attitude of buyers of labor as a mere ware. When the employer then feels the pressure of competition he is more likely to force the lowest wage that is possible and to compel the workers to accept less favorable conditions than if he were in more personal relations with them. Where the immediate direction of an establishment is intrusted to paid managers who are responsible to stockholders, the managers' success is judged almost exclusively by the dividends they succeed in earning. Hence they are under stronger and more persistent temptation than are active owners to drive hard bargains with their employees. Many examples might be found where managers and resident directors have wished to pursue a more liberal policy than absentee shareholders would permit.

§ 2. **Need of common action among wage-workers.** These same industrial changes caused employers, even earlier

[2] See Vol. I, p. 459.

than it did employees, to have something of a "class-conscious" feeling, which tempered the spirit of their mutual competition, especially in bidding for the services of workers. The smaller the number of employers the easier it is by an understanding to suppress competition on their side. If there is only one factory of a kind in a town the employer is able at times to drive a harder bargain with his employees. Especially in times of industrial depression is a change of employment difficult for the laborer, involving for him much trouble and loss of time and money in moving. But it is possible to exaggerate the degree to which competition among employers of labor is weakened to-day. In the long run and at many points competition must be felt in all such cases. The notoriously unfair employer will find his workmen drifting away, his working-force reduced in number and quality at times of greatest need, and his evil reputation going abroad among workmen. A better realization of this fact has led many employers to pursue a farther-sighted policy that fosters a better understanding and a kindlier feeling on both sides of the labor-contract.

Another effect of the growing size of business units is to give the workers less personal acquaintance with each other. When they are unorganized they have less unity, common opinion, and power than the workers in the old-fashioned shop with its close personal acquaintance and ready interchange of views. In the wilderness of a great modern factory a worker may be unknown in name and interests to the man touching elbows with him. Moreover, in America, differences in nationality and in speech among immigrant workers often effectively prevent a common feeling of their interests and assertion of them. There is an analogy between these conditions and the political conditions that early led simple democracies to give way to representative governments. So long as a community is small and men know each other personally, popular government may exist without complex machinery, but when numbers become larger, public opinion can be concentrated and

made effective only by delegating the functions to elected representatives.

§ 3. **Functions of labor organizations.** Out of these conditions have grown the various kinds of labor organizations. Their first object is to maintain and increase wages. Closely connected with this is the remedying of various abuses in respect to methods of payment, measurement of the output, and conditions of work. Almost coördinate with the aim of higher wages of recent years has been that of the shorter work day. Labor leaders have frequently asserted when the two demands have been made together, that a reduction of hours is the more desirable. Better conditions of safety and sanitation in their work were not the first thought of laborers when they organized. As a result of habit and ignorance (widely prevalent at that time) they were remarkably unconcerned about this matter. Reforms in this direction at the outset had to come largely from sympathetic observers, the "philanthropists," often described as sentimentalists. But the modern, more enlightened, labor movement has better ideals and policies in respect to the safety, sanitation, and decency of the working places.

Labor organizations have also secondary objects of very great importance. They are nearly always in some measure mutual-benefit associations, and provide in varying degrees insurance against accident, sickness, death, or lack of employment. All unions in a measure serve their members as employment bureaus, and some make this an important feature. Through trade-papers, correspondence, traveling members, and in meetings, information is exchanged regarding conditions of employment in various parts of the country. Labor organizations by means of their discussions and through their special periodicals are a strong educational force in matters political and economic. The local labor organizations often come to be the center of the social activities and interests of many of their members, and even of all the members of their families. The organizations thus serve the functions of social

clubs, of literary societies, and of civic centers for their members.

§ 4. **Types of labor organizations.** Among the many organizations of wage-earners three main types may be distinguished: the labor union, the trade union, and the industrial union, tho often they are all spoken of as trade unions without distinction. A labor union admits all classes of wage-earners and even business and professional men into the same local chapter. The "Knights of Labor" is the most notable example that America has seen of this type. The national organization was composed of local chapters, to membership in which every one was eligible excepting bankers, lawyers, gamblers, and saloon keepers. Organized as a single local chapter in 1869 it grew very rapidly until it attained its maximum membership of 600,000 in 1886. From this point it rapidly declined in membership, and since 1900, altho its organization is still maintained, has been of very little influence.

A trade union is an organization of wage-earners in the same handicraft or occupation. Unions exist among workers in all the old distinctive handicrafts, such as the printers, stone cutters, cigar makers, carpenters and in many other groups such as musicians and retail clerks. The local chapters in many cases have been long united in national unions (often international, including the United States and Canada).

An industrial union is one that seeks to unite all workers employed in the same class of establishments regardless of their craft or the kind of work they do. The most notable examples are the United Mine Workers, the Brewery Workers, and the Industrial Workers of the World.

In 1881 a number of national trade unions united for certain purposes, to form the American Federation of Labor with a membership of about a quarter million workers, which has steadily increased since that date. The American Federation of Labor now includes also some important unions of the industrial type. Several strong national trade unions (the

most important being the brotherhoods of railroad employees) are not affiliated with the American Federation of Labor.

§ 5. **Statistics of labor organization.** The ratio of organized workers to the population is estimated (figures for 1910) to be highest in the United Kingdom, being nearly 7 per cent; it is next highest in the German Empire, being nearly 6 per cent; whereas, in the United States, it is but 2.3 per cent. This difference is largely due to the much greater relative importance of agriculture in the United States.

The total membership of trade unions in the United States and Canada is estimated to have been in 1910 about 2,200,000, of which only about 100,000 were in Canada. This was 5.5 per cent of all persons (38,130,000) gainfully employed, or 6.8 per cent of male employees, and 9 per cent of female employees. Organization was very weak (less than 1 per cent) among the workers in a group of industries occupying nearly one-half of all workers, including agriculture, the hand trades, oil and natural gas, salt, and rubber factories. Organization was not of large extent (1 to 10 per cent) in other groups of industries occupying more than one fourth of all workers, including those engaged in producing quarried stone, food stuffs, iron and steel, metal, paper and pulp, stationary engineers, in public, professional, and domestic service, and in clerical work. Organization was of much greater strength, including 10 per cent or more of the workers, in the remaining industries and occupations.

If deduction be made of the employing and salaried classes, about 7.7 per cent of all persons occupied were organized. If, further, deduction be made of agricultural, clerical, publicly employed, commercial and domestic workers, about 16 per cent of the remaining 13,760,000 persons are organized (of women 3.7 per cent). Among the occupations most highly organized are those of railway conductors (87 per cent) and engineers (74 per cent). In the building trades about 16 per cent are organized, of granite cutters 69 per cent, masons 39 per cent, plasterers 32 per cent, carpenters 21 per cent,

and painters 17 per cent. Similar striking differences appear among the occupations in the printing industry; of stereotypers 90 per cent are organized and of compositors only 35 per cent. These figures point to inherent differences in the conditions favoring organization. Even in the same craft a high degree of organization may be found in the cities and little or none in the smaller towns (e.g., in the case of the printing and building trades in general).[3]

§ 6. **Collective bargaining.** The fundamental policy of trade unions is the substitution, for the individual wage bargain, of collective bargaining between the delegated representatives of the working men and the employer, or group of employers, or their representatives. The wage-earners bargaining collectively may be those of a single establishment, or of a group of establishments in the same locality, or of a wider territory even national in extent. Accordingly, they are represented in the negotiations by trade-union officials with narrower or wider jurisdiction. Employers in some cases had tacit understandings with each other before laborers were organized. But in many cases the individual employer was at a marked disadvantage after the organization of his employees. The result has been the rapid spread of employers' organizations, so that in industries where laborers are highly organized, two-sided collective bargaining has become more and more usual.

A large part of the effort of trade unions is directed toward ensuring the use of collective bargaining. This is the purpose of many of their demands, even of some that hardly appear to have any such consideration. Collective bargaining practically necessitates the use of "the standard rate," since only with reference to some standard rate, a market price for labor, is it possible for a wage contract to be made by labor officials for a group of men. The standard rate may be a piece price or a time price, and in many cases the unions

[3] See *Quarterly Journal of Economics*, May, 1916, article by L. Wolman.

strive to secure the latter as more convenient for their purposes. The standard time rate usually is but a minimum and many of the more skilful workers receive wages above the minimum. But the standard minimum tends to become also the maximum in many cases, the more so when the union has succeeded in enforcing a pretty high standard rate.

§ 7. **Limitation of competition among workers.** In order that the representatives of organized laborers may act effectively in collective bargaining the first condition necessary is that a large proportion, if not all, of the workers of the trade in the establishments concerned shall be organized. A common sense of wrong is one of the strongest motives to bring workers together, and has prompted the origin of many a local chapter. Then constant and strenuous efforts are made to bring workers into the organized ranks. Experienced organizers knowing all the arts of persuasion devote their whole time to this task, being paid regular salaries. When friendly argument fails, threats may be used and sometimes personal violence. The public opinion and class feeling fostered among members of an organization in times of difficulties are analogous to the sense of patriotism in the nation at large and at times may displace it in the hearts of organized laborers as is seen in opposition to the militia and to the maintenance of order in times of strikes. The most effective of all peaceful methods is petty persecution rising at times to social ostracism. The individual who declines to enter the union is denounced as a traitor to his fellow workers and is made to feel their scorn. The use of the union card to be carried by every member to show whether he is in good standing is an effective way of enforcing these measures. Finally, where all these measures fail, pressure may be brought upon the employer to get him to force unwilling workers into the union.[4]

Further to give control over those working in a trade and to reduce competition among workers, unions often limit the

[4] See below, sec. 14, on the closed shop.

number of apprentices and determine who shall have the privilege of learning the trade. By a variety of regulations they limit the output and in many cases (tho less frequently now) have opposed the use of labor-saving machinery. Further to enforce these policies they seek to have each special kind of work controlled by a special union. This gives rise to disputes between rival unions and causes annoyance and loss to the workers themselves, to the employers, and to the general public.

§ 8. **Strikes in labor disputes.** A strike is a concerted stopping of work by a group of employees to enforce a demand upon the employer. A lockout is an employer's closing of his shop because of a disagreement with his employees. The strike is, in its direct and indirect, immediate and ultimate, effects the most important weapon of the organized wage-earners in their relations with their employers. To newly organized laborers the union appeals mainly as an instrument for striking, for threatening the employer, or for making him suffer to compel him to accede to their demands. The effectiveness of a strike lies in the loss it threatens or occasions in the stopping of machinery, the ruin of materials, the loss of custom, and the failure to complete contracts that have been undertaken.

The employers will often, to break a strike, pay to others for a time more than the current rate of wages. The success of the strikers being dependent on their ability to keep the employer from filling their places, their energies are bent upon that end. The losses that strikes cause to workers in stoppage of wages, to employers and investors in destruction of plant and in suspension of profits, and to the public in the interruption of business, aggregate an enormous sum. The direct losses to employers and strikers in the 20 years between 1881 and 1900 have been estimated to have been nearly $500,000,000, a large sum, but amounting to less than 1 per cent of the wage-earners' incomes. It is, however, impossible to estimate at all exactly losses that in many cases are indi-

rect and intangible. The strikers are concerned in each case not with the balance of total losses and total gains to society as a whole, but with the net gain that they expect to accrue in the long run to themselves. Viewed in this way it is true that there are various indirect benefits in strikes that are not easily calculable, particularly the advances of wages made by employers to avoid strikes which they know will otherwise occur. In regard to the wisdom of any contemplated strike, opinion is always somewhat divided, as it is in regard to the value of strikes in general.

§ 9. **Frequency and causes of strikes.** Strikes were relatively decreasing in number from 1880 to 1900, but from 1901 to 1905 the annual average was more than twice as large as in the preceding decade. On the whole, strikes have been more numerous in periods of business prosperity when there was a better chance to get concessions from the employers. But they occur also in the periods following crises, when the workers seek to minimize cuts in wages and to prevent the depression of working conditions. More broadly viewed, strikes appear to accompany readjustments to dynamic conditions. As wages as a rule rise more slowly than general prices,[5] it was to be expected that the period since 1900, in which the general price level was rising at the rate of about 3 per cent a year, should have been marked by increasing resort to strikes.

The immediate causes of strikes have been changing in relative importance. In 1881, at the time of the very rapid organization of unions, over 71 per cent of all strikes were directly connected with wage demands (61 per cent for increase and 10 per cent against reduction). But in 1905 the total for these causes was only 37 per cent, whereas the proportion of strikes for reduction of hours nearly doubled (from 3 to 5 per cent) and the proportion of those concerning recognition of unions and union rules increased fivefold (from 6 to 31 per cent). Ultimately nearly every demand of the

[5] See Vol. I, pp. 223–224, and above, ch. 6, sec. 12 and ch. 10, sec. 7.

laborers is related to the question of wages; but these figures show that when organization is new this relationship is more immediate, whereas later more effort is directed toward securing the stronger strategic position that comes with recognition of the union.

§ 10. **Picketing and the boycott.** Picketing by strikers or their friends is intercepting and accosting all persons approaching or leaving the place of work, to inform them of conditions and to dissuade them from working there. When peaceable means fail, often there is recourse to violence both against the employer and his property and against nonstriking workers. Indeed, many persons declare that peaceable picketing is impossible, and it surely is difficult to attain in view of the temptations of human nature under the circumstances.

Almost always connected with a strike is the practice of the boycott, which is a combination of wage-earners to cut off an employer (or group of employers) from business dealings. The boycott is found in varying forms and degrees, broadly distinguished as simple- and compound-boycott. In simple boycott only persons directly interested in the trade dispute refuse to deal with the boycotted person. The question arises as to who are to be deemed directly interested, whether it includes only the actual strikers in a particular establishment, or whether it includes organized workers in sympathy with them. The latter case is presented when an "unfair" list is published in labor journals. It seems that only the former case is a really simple boycott. The use of the simple boycott, the refusal of a person, or even of a conspiring group of persons, to deal with a person with whom they have an industrial dispute, appears to be a part of the elementary rights of personal liberty. Beyond that point the boycott is compound in varying degrees.[6] It is the compound form

[6] The "unfair list" is usually given as a form distinct from either the simple or compound forms. The "fair list" published either by labor journals or by a consumer's league is not declared to be a boycott.

which is usually referred to in discussion and in court decisions on the subject. It is the compound boycott that has been described as "a combination to harm one person by coercing others to harm him." The compound boycott, as experience shows, has moral limits as well as legal limits. It is doubtful whether the boycott can be extended at all beyond the first degree of personal relations without becoming anti-social, whether it is the weapon of organized workers or of organized wealth. The endless-chain boycott, a measure of excommunication without limit, pronounced against an offending employer, non-union workers, and every one in any way befriending them, is an effort to drag every one else into a dispute that is primarily a private matter.

§ 11. **Effects of organization upon general wages.** The crucial economic problem in connection with trade unions is not as to their methods (that being rather a political problem) but as to their effect upon wages. There must be distinguished two questions: first, as to their effect upon the general level of wages; and next, as to their effect in raising the wages of the organized laborers alone. As to the first, the thought has sometimes been expressed by sympathetic social students outside of trade-union circles that but for the organization of labor wages in America would be no higher than they were in 1850. This seems to be assumed in much of the argument of labor leaders, for they speak as if all wages, but for trade unions, would be at the starvation level; and they credit everything above that level to the work of the union.[7] This claim is peculiarly effective in America, where wages are and always have been relatively high. But proof of the claim is lacking. As we have seen, even now fewer than 1 in 16 of all gainfully employed, and fewer than 1 in 12 of those working for contractual wages are organized.

[7] In a book by an English trade-unionist, Trant, reprinted and circulated by the American Federation of Labor as representing its theory and claims, all the advances that have been made in wages are said to be due to the trade-unions.

On no principle of value could the mere organization of one-twelfth of the wage-earners, without permanently withdrawing them from the labor market, explain the relatively high wages of the other eleven-twelfths. In many lines where labor is not organized, as in teaching, clerical, professional, domestic, and agricultural services, wages have risen as much or even more than in most of the organized trades. The underlying economic forces determining the general level of labor-incomes in a country are much more fundamental in nature than labor unions or protective tariffs.[8] The trade-union authority already cited seems in another passage to admit a view not essentially unlike that just expressed when he says: "Capital is increasing faster than population. . . . It seems therefore merely in obedience to natural laws that wages should rise."

The only reasons ever suggested for thinking that the organization of one-twelfth (or any larger proportion of the wage-earners) could in any general way raise the labor-incomes of those remaining unorganized are: first, that organized labor sometimes leads the way in securing favorable legislation; and, secondly, that if organized workers get higher wages this sets a standard which it is easier for the unorganized then to attain. Both of these suggestions may have some little validity in special cases, affecting slightly a small proportion of the unorganized workers, but neither touches fundamental causes of general high wages. Whereas, it is clear that when the unorganized laborers constitute the main body of consumers for the products of organized labor (and this unquestionably is in large measure the case) any increase in wages that can be secured through organization by a portion of the workers must, in part, be subtracted from the "real" incomes of the unorganized workers. The employer is middleman, not to a great degree the ultimate consumer of labor.[9] Some part, it is true, of the higher wage might be

[8] See Vol. I, pp. 227, 439, 466, 467, 504–507; and above, ch. 14, sec. 8.
[9] See Vol. I, pp. 217, 222–223, 352, 356.

taken from profits or from wealth-incomes, but this would still leave the unorganized workers the losers.

§ 12. **Competitive aspect of organization and particular wages.** A different question is presented as regards the influence of organization upon particular wages, and primarily upon the wages of organized labor. The trade-union authority before cited says, "Where there are no unions wages should be lower. This is exactly the case." And he quotes: "Wherever we find union principles ignored, a low rate of wages prevails and the reverse where organization is perfect." But he later explains in part this difference: "The union men are the best workmen and often employers pay a man more than union wages. This is not surprising as no man can be a union carpenter unless he be in good health, have worked a certain number of years at his trade, be a good workman, of steady habits and good moral character." If this be true, as doubtless it is to some degree in many trades and places, it is in accordance with competitive principles that, as the elite of the trade, the organized laborers should get higher wages than those outside the unions. Moreover, the unions exist mainly in the more populous places where costs of living as well as wages range higher than in the small towns and in the rural districts. A comparison merely of wages in money in such cases is misleading as to the conditions of real income. Further, a higher standard of output prevails in the cities where organization is greatest, and older men and the less efficient that are unable to "keep up the pace" drift away into unorganized shops or to villages where no standard union rate is in force. So far as unions help to develop the intelligence and promote the sobriety and efficiency of their members, they are a positive economic force making for higher wages. The book before quoted expresses, somewhat vaguely, an opinion in accord with these facts when it says: "It is an error to think that the trade union seeks to determine the rate of wages. It cannot do that. It can do no more than affect them." And so, with organization as

well as without, the wages of individuals and of classes of laborers are determined by the general principles of price as applied to their services. Where neither the employer has a monopoly in his business nor the organized laborers have a monopoly of the labor supply, there is two-sided competition in the labor bargain, and organization may help to raise particular wages inasmuch as it acts in the competitive ways above mentioned and as it helps to restore to the laborers a truer equality of competition.

§ 13. **Monopolistic aspect of organization and particular wages.** The action of organized labor is not, however, limited to the competitive field, above discussed. Wages in particular industries may, by the action of trade unions be raised and maintained above a true competitive rate. This of course can be done only in accordance with the principles of the service-value to the consumer and of service-price in the employment-market. The supply of labor is in a variety of ways artificially limited by the efforts of the unions. It may be done temporarily by striking when a failure to fill orders will cause the employer exceptional loss. Violence in strikes and boycotts is often the desperate attempt to create and assert a measure of monopoly power where of itself it does not exist, i.e., where other workers stand ready to take the jobs at the prevailing rates of wages. Monopoly is created if apprentices are limited to fewer than in the long run would be attracted into the trade by the prevailing wages. It is created if the unions artificially limit output to less than is consistent with the health of the worker. Monopoly is created if unions strong enough to keep "scabs" from getting work, fix their dues high or put other obstacles in the way of increasing the membership. Probably the most striking cases of high wages for organized labor are of this kind. The element of labor-monopoly evidently is mingled in all degrees from the slightest to a very great amount, in particular economic situations.

§ 14. **Open vs. closed shop.** The question of labor

monopoly is involved in the very crucial question of the closed vs. the open shop. A closed shop (or union shop) is a shop in which no non-union men may be employed, even at union wages. Its existence is evidence that the union is strong enough to compel the employer to act on this principle and thus virtually to force all his employees into the union. The refusal of a demand for the closed shop is often the ground for a strike. Where this is so unions usually assert that the closed shop is essential to the existence of the union. If union and nonunion men work side by side there are many ways in which the employer is able to discriminate so as gradually to break down the union. If business slackens, the union man may be the first to be discharged; if any preference is given it is to the non-union man. While this may be true, it would seem, on the other hand, that an unmodified closed shop, with the conditions of membership in the control of the union, creates a distinct monopoly of labor leaving the employer helpless in any wage dispute and enabling the union to enforce its every demand regardless of the competitive conditions of the labor-market for that class of services.

§ 15. **Political and economic considerations.** The question here takes on a broad aspect. Is the closed shop, and are the other policies of trade unions, morally right; and ought they to be legally sanctioned? The answer to such questions is not for the economist alone to give. The questions involve other than economic considerations. They involve moral and political considerations—not merely existing formal law, but the fundamental issue of personal liberty and of interference with the liberty of some citizens by another group acting without political authority. For example, if a workman is unable to earn the standard rate [10] and is not permitted to take less, he is forced to move to a place where there is no union, or is forced out of the trade entirely. In the latter case he probably is compelled to take a lower wage than he

[10] See above, sec. 12.

could get in his regular occupation. Likewise, this change artificially increases the pressure of competition and reduces the wages of others in the occupation to which he turns. So in the case of persons prevented from becoming apprentices in a trade, or kept from taking work by threats, or by the dread of boycott, or by the fear of violence, in any degree however slight, there is present an element of personal coercion by the organized laborers. This is the price others are made to pay for a favorable effect on the wages of the organized laborers. Now the strictly economic question concerns merely the part as to the effects upon wages, and the economist (as such) is going outside of his special field when he pronounces on the moral rectitude (and the desirability in law) of such acts and policies. One who fully shares the feelings of the organized workers will believe that the winning of a strike or the general improvement of the strikers' condition is so important that it outweighs the evils to other individuals and to society as a whole. Indeed, to one in that state of mind the evils appear very small or nonexistent. The economist can only issue the warning that the commonest illusion he encounters is the belief of each class—commercial, banking, manufacturing, wage-earning—that what is for its particular interest is, in a peculiar manner, for the general interest, so much as to justify favoring legislation or special exemption from the general law, or even sheer lawlessness.

§ 16. **The public's view of unions.** We may, however, observe the view of the onlooker striving to be impartial. The attitude of the public in labor disputes, and particularly in regard to the closed shop, is a vacillating one. The general public sympathizes in large measure with the unions in their efforts up to a more or less uncertain point; but the public does not like to see organized labor with the power to dictate terms absolutely to the employers any more than it likes to see employers crush the union. The unions are effective in varying degrees in strengthening the bargaining power of the workers, and accordingly the results vary not

merely in degree but in kind. The public wishes to see "fair play," and up to a certain point the union is a device to get fair play. In truth, what is in the public's thought, somewhat vaguely, is approval of unions so far as they go to establish a real equality in competitive bargaining with the employers, but disapproval where the power of the union gets greater and becomes monopolistic. It is at this point that organized labor loses the sympathy of most of "the general public" outside of unions. When the union tries to force a higher wage than the market will warrant, when it strives not to establish but to defeat competition, the public condemns. It sees, tho not quite clearly, that such action makes an unstable equilibrium of wages which tempts to constant friction and discord with employers and with unorganized laborers. It sees also that if the unions force a wage higher than a fair and open market affords, this is rarely done at the expense of the employer; that in the long run it is at the expense of the purchasing public itself, including the unprivileged workmen.[11]

In accordance with these facts and opinions there has developed, at least in one respect, a pretty definite conviction on the part of the public regarding the closed shop, namely: the closed shop should go only with the open union. A union under the closed shop policy is exercising a quasi-public function, that of controlling the industrial action of private citizens against their will. The union therefore, in this view, must cease to be a purely private, voluntary organization, and become in some respects subject to public regulations as to its internal rules and administration. This view, however, is very unacceptable to the leaders of organized labor in America, and there the question now stands.

§ 17. **Future rôle of organization.** In the light of the principles of wages it appears that organization most easily

[11] We are expressing here the general opinion, not pronouncing a final justification of competition as a rule of conduct. On this something will be said later, in ch. 31.

gains results, and the most stable results, when wages are below or near the competitive rate. An earnest effort on the part of the workers is necessary for them to get the share that true competition would accord them, but the attempt to force wages beyond that point must be the occasion of increasing friction. With so modest an ideal however, as the true competitive wage, organized laborers and their leaders cannot be expected always to be content.

Aside from its effects upon the wage-bargain, unionism finds its greatest justification is in its unspectacular fraternal, mutual-benefit, and educational functions. The chief forces favorable in the long run to wages that can be affected by organization are domestic peace, order, and security to wealth; honesty and good faith between man and master, in law-maker and in judge; efficiency and intelligence of the workers; and far-sighted social legislation. Some of these contribute to greater productiveness, others to a fairer distribution. In all these ways organized laborers have made valuable contributions, unfortunately neutralized in many cases by a narrow class outlook. Organized labor is here to stay for a long time to come, and as the élite of the wage-earning class it should, and probably will, be an increasing force for political betterment and for social welfare in the republic.

CHAPTER 21

PUBLIC REGULATION OF HOURS AND WAGES

§ 1. Spread of the shorter working day. § 2. The shorter day and the lump of labor notion. § 3. Fewer hours and greater efficiency. § 4. Child-labor. § 5. Child-labor legislation. § 6. Limitation of the working day for women. § 7. Limitation of the working day for men. § 8. Broader aspects of this legislation. § 9. Plan of the minimum wage. § 10. Some problems of the minimum wage. § 11. Mediation and voluntary arbitration. § 12. Compulsory arbitration. § 13. Organized labor's attitude toward labor legislation. § 14. Organized labor's opposition to compulsory arbitration. § 15. The public and labor legislation. § 16. The public and compulsory arbitration.

§ 1. **Spread of the shorter working day.** Since about 1880 a shorter working day has been one of the prime objects of organized labor in America. Notable progress was early made in some trades, reducing hours from 11 to 10, or from 10 to 9, and in a few cases from 9 to 8. In the building trades in the cities, especially, the eight-hour day has come to be well nigh the rule. In 1912 it was estimated [1] that 1,847,000 wage earners were working in the United States on the eight-hour basis; of these 475,000 were public employees. A large proportion of the remainder were women and children whose hours were limited by law, or were men working in the same establishments with them. Since that date the eight-hour day has been more widely adopted both through private action in many establishments and by legislation. The year 1915 witnessed an especially rapid spread of the eight-hour day.

§ 2. **The shorter day and the lump of labor notion.** The

[1] By the Secretary of the American Federation of Labor.

shorter working day is advocated by most workers in the belief that it will result not in less pay per day, but in even greater pay than the longer day, even if the output should be decreased. This view is connected with the lump of labor notion.[2] It assumes that men will work no faster in a shorter day, and that there is so much work to be done regardless of the rate of wages; and concludes that the shorter day will reduce the amount of labor for sale and cause wages to rise. To the extent, however, that laborers, as consumers, mutually buy each other's labor, evidently this loss due to curtailing production must fall upon the laborers as a class. The workers nearly always call for the same daily pay for a shorter day, which means a higher wage per hour. If wages per hour increase less than enough to make up for the fewer hours,[3] the purchasing power of the workers must be reduced. If the output per hour is increased proportionally to the pay per hour, the existing wages equilibrium would not be disturbed. But if the output increases not at all or in less than the proportion of the increase in pay, there is an inevitable disturbance of the wage equilibrium. In a competitive industry this would compel a speedy readjustment of wages downward. If a certain group, or large number, of workers were to begin turning out only 80 per cent as large a product as they did before while getting the same money wage, the costs per unit would be thereby increased. Prices must rise or many of the establishments must close, and then prices would rise as a result. This must throw some of the workmen out of employment and create a new bargaining situation for wages. If the general eight-hour day were applied to every industry and to all wage workers at once, then all workers and all employers in the industry would be in a like situation. But at once there must occur changes of consumers' choices in a great number of ways. If there are

[2] See Vol. I, pp. 458–467.

[3] For example, increase less than 25 per cent per hour in changing from a 10 hour to an 8 hour day.

one fifth fewer goods evidently at least one fifth of the consumers must go without. This would largely be the wage workers. The things of which wage labor makes up a large part of the costs will rise in price relative to the things of which self-employed labor and of which materials and machinery make up a relatively larger part. This must compel a reduction of the demand for the products of wage labor relative to other things, and be reflected to labor in a lower wage. This reduction would not necessarily be just in proportion to the reduced output (that is, say, 20 per cent if from 10 to 8 hours, or 11 per cent, if from 9 to 8 hours). It might even be more, but probably would be somewhat less. In any case, both the money wages and the real wages of laborers, either in the particular trade or generally, must be reduced by a general reduction of hours that results in a decreased output. In such cases, even when the workmen by a strike or general movement secured the same wage scale for a day of fewer hours (a higher wage per hour), they would be unable to hold it excepting where they had monopolistic control of the trade.

In a period of rising prices due to an increasing supply of gold, the readjustment of wages (per hour) away from an artificially high level down to a competitive rate goes steadily on. Even when money wages remain the same their purchasing power declines at such times, and this serves soon to bring the high money wages into accord with the lower value of the services.[4]

§ 3. **Fewer hours and greater efficiency.** Quite contrary to the foregoing view is the claim that in the shorter day the rate of work is so increased that the output is at least as large as in the longer day, or even larger. A faster working pace is possible with a shorter day, particularly in those operations calling for physical or mental dexterity. This view is less attractive to the workers than the preceding one, but is more acceptable to the employers and to the public. The

[4] See above, ch. 6, sec. 12.

change undoubtedly has resulted in many cases in the manner indicated, and could be made to result so in many other cases by applying the methods of scientific management. But it is a change which cannot be repeated indefinitely and under all conditions with like favorable results. Whether in any particular case it can be, depends in part on the length of the working day at the start. Such an increase in output might occur in a change from exhausting hours, as from 12 to 10, and again from 10 to 9, and yet not be possible in a change from 9 to 8. Moreover, the speeding up of the workers beyond a certain point may have bad physiological effects outweighing the benefit from shorter hours. It is now said that with the increase of automatic machinery there are more and more workmen who much of the time have merely to watch the machine-tool run, and occasionally adjust the material. There has, however, been collected a notable body of evidence to show that, in many industries and in different establishments using much machinery, a reduction of hours to a number as few as eight has been followed by the increase of the output per worker, or by improvement in the quality of work, or by improvement in the management, resulting in a reduction of the cost of production. This is often sufficient, or more than sufficient, to compensate for the shorter time. Wages have remained as high as, or higher than, before, and employment has been more regular. So far as this result is due to the individual worker, it is explained by the same evidence referred to below [5] as bearing upon the health of the worker. This evidence tends to prove that with longer periods of rest and recreation the worker lives in a physical and mental condition fitting him far better for his work, and for continuing his working life.

§ 4. **Child-labor**. All the foregoing arguments are weighed in terms of private incomes and of the value of the products, whereas the main considerations that have of late been influencing legislation and judicial decision in favor of

[5] See especially, sec. 8.

shorter hours have been those of public welfare. The legal limitation of working hours is being treated primarily as a health measure, into the judgment of which is more and more entering a broader conception of the happiness, morality, and opportunities for good citizenship for the worker and his family.

In agricultural conditions, such as have prevailed generally in America, there is little need of limiting the hours of work and the age at which children may begin to work. The barefoot boy trudging over clover fields to carry water to the harvesters may be the happier, healthier, and better for his work. Child-labor in agriculture has never become a social "problem" so long as the children work with their own parents at their own homes; but the labor of children for wages, especially in gangs on large farms (as in beet cultivation and cranberry picking) or in canning factories, has exhibited evils as pronounced as any in urban manufacturing conditions.

The evil of forcing children into factories was early recognized. The most obvious evils of child-labor are neglect of the child's schooling; destruction of home life; overwork, overstrain, and loss of sleep, with resulting injury to health; unusual danger of industrial accidents; and exposure to demoralizing conditions. The usual assumption that the worker is able to contract regarding the conditions of labor on terms of equality with the employer is most palpably false in the case of children. The child, subject to the commands of his parents and guardians, is not a free agent. Lazy fathers are tempted to support themselves in idleness on the wages of their young children. Often poverty leads the parents to rob their children of health, of schooling, and of the joys of childhood. The competition of child-labor also depresses the wages of adults, and thus the evil grows.

§ 5. **Child-labor legislation.** The limitation of hours was first applied to children working in English factories early in the nineteenth century and thence has extended throughout

the world, tardily following the spread of the factory system. The first American law of the kind was in Massachusetts, in 1842, limiting to 10 hours the labor of children under twelve years of age in manufacturing establishments. All the earlier state laws established low minimums of age and high maximums of hours, and were poorly enforced for lack of adequate administrative machinery, this in turn being the result of lack of active public interest. In all these respects many states gradually improved their child-labor laws in the latter part of the last century, and much more rapidly since 1903. Now the maximum working day for children in about one half of the states is 8 hours, in one quarter is 9 hours, and in one quarter is 10 hours (and in a few southern states, 11 hours). Night work by children is very generally forbidden (in about forty states). During the same time the minimum age has been pretty generally raised to fourteen years for factory work, with higher ages (sixteen, eighteen, or even twenty-one) in some states for certain occupations dangerous to health or morals. In addition to these general limitations, special provision is made for individual examinations to determine whether the child is mentally and physically fit to work and has met the requirements of the compulsory education laws of the state.

The most important child-labor legislation in recent years was the enactment of the long debated national child-labor law (passed in August, 1916). This prohibits the interstate shipment of goods produced in factories wherein any child has, within thirty days, been employed under unfavorable conditions as to hours and time of work as specified in the act. The passage of this act was the culmination of years of efforts in and out of Congress.

Child-labor legislation viewed as a merely negative policy is not of great moment. Its real significance is to be judged only in connection with the broader social policy of protecting and developing all of the children of the nation to be healthy, intelligent, moral, and efficient citizens. Children

growing into blighted and ignorant manhood and womanhood are threats to society.

§ 6. **Limitations of the working day for women.** But little later than the limitation of child-labor usually comes some legislation to limit the hours and conditions of employment of women. The grounds of this policy are that women likewise are less able than men to protect themselves in the labor contract, that they are physically weak and are peculiarly exposed to certain dangers to health, that as future mothers they need protection for their own and the public welfare, and that in the period of maternity the dangers are especially great. The work of women in factories operates in some ways to depress the wages of men, and it is harmful in its effects upon the home and family life. At present five states limit the hours of women to 8 a day, twelve to 9 a day, fifteen to 19 a day, four to 11 or less a day. A number of states forbid the work of women in designated places of work such as saloons, mines, or where constant standing is required. Only as late as 1911, in America, has legislation, now in four states, given maternity protection, as is now more fully provided in European countries in connection with systems of health insurance.

In all of the great industrial countries of Europe night work by women is restricted (prohibited between 10 P.M. and 5 A.M. or yet more narrowly limited); but legislation along this line is found in only eight American states.

§ 7. **Limitations of the working day for men.** The general assumption made in law has been that the adult male worker is competent to judge of the working conditions, hours of labor, and wages, and is capable of protecting his own interests sufficiently by his power of refusal to accept employment. The legislatures have, much more tardily than in their legislation for children and for women, acted contrary to this assumption, but, when this has been done, the courts in America have vigorously asserted the general doctrine and denied the constitutionality of the laws. However, some ex-

ceptions were made in legislation, and, after much apparent hesitation and vacillation, were allowed by the courts to stand, and these have now grown in number until they form an impressive total.

These exceptions have come in various ways. There is first, the eight-hour limitation in public employment, required in federal employment in 1868, really effective since 1892, and now in force likewise in about two thirds of the states. In almost the same jurisdictions—national, state and municipal—eight hours is the legal day on work done in private business for the governments. Work on railroads and street railways, particularly in the direct operation of trains, such as the work of dispatchers, signal men, and trainmen, is subjected to a large variety of regulative measures, hours being limited in some cases to 8, in others to 9, 10, 12, or 16, and in a number of cases a specified minimum number of hours of rest is required after the maximum hours of labor. These laws are primarily for the protection of the public, but they afford a protection to the employee much needed, as many well-authenticated cases of excessive and exhausting hours demonstrate.

The limitation of hours has very recently been extended to many private businesses in which exceptional conditions exist affecting the health of the workers or the safety of the public. This development has occurred almost entirely since the United States Supreme Court in 1898 (Holden vs. Hardy) sustained a Utah statute limiting to eight the hours of labor in underground mines. Now 8 hour laws in certain specified cases are found applying to mines, smelters, tunnels, and a variety of other kinds of work, and in a few cases the limit is 9, 10, or 11 hours.

§ 8. **Broader aspects of this legislation.** The subject took on a new aspect when the legislature of Oregon, in 1913, declared broadly that "no person shall be hired, nor permitted to work for wages, under any conditions or terms, for longer hours or days of service than is consistent with his health and

physical well-being and ability to promote the general welfare by his increasing usefulness as a healthy and intelligent citizen," and fixed ten hours as the limit of work consistent with such a measure of health and welfare, in work in any mill, factory, or manufacturing establishment. This law was sustained by the Supreme Court of that state and was carried on appeal to the United States Supreme Court.[6] In support of the law there was presented a voluminous brief giving a most impressive body of evidence from scientific and from practical business sources, to show the many evils, popularly unsuspected or underestimated, that result from long hours even in industries of no exceptional hazards.[7] Physiological and psychological tests demonstrate that the fatigue following more than a moderate working period not only reduces immediate efficiency, but so poisons the system that greater liability to accident, disease, intemperance, immorality, and premature decay, results.

Two main purposes appear somewhat intermingled in this legislation in limitation of hours. The first purpose is to protect the public directly where the safety of others is dependent on the health and efficiency of the worker. The second purpose is to protect directly the worker's health and welfare, that policy being recognized to be in the long run the best likewise for the public welfare. In legal reasoning it is being recognized that the individual wage-worker, even the adult male, is not in a position to judge the number of hours he ought, for his own good, to work, and is unable to fix the length of his own working day. As a matter of economic theory, the usance of a child, a woman, or a man, is merely that kind and amount of service that can be given out by each without repressing the normal possibilities of growth, reducing the normal health and vigor, or shortening the normal period of

[6] At this writing the case, Bunting vs. the State of Oregon, is still undecided.

[7] Published as "The case for the shorter working day," by the National Consumers' League, see especially pp. 621–892.

healthy productive human existence.[8] It is becoming a general social policy to prevent the abnormal strains of industry that cause the unnatural deterioration of the human factor in industry. A wage-worker may be permitted to sell his daily *net* fund of working power—his usance—but not his life.

§ 9. **Plan of the minimum wage.** Even more recent than the legislative regulation of hours downward is the attempt to regulate wages upward in the case of certain low-paid wage-workers. The modern[9] movement for the minimum wage began in Victoria in 1896, and it soon extended to nearly all the other Australasian states. Great Britain applied the plan in 1910 to industries in which wages were exceptionally low. The plan was first adopted in the United States by Massachusetts in the year 1912, tho in an emasculated form, and spread so rapidly that at the end of 1915 it was found in at least 11 states. Minimum wage laws usually lay down "a living wage" as the standard to be used, and either prescribe a flat rate of wages, or, more often, leave the decision in each case to the wage commission established to administer the law.

Generous sympathies have guided this movement of which much has been hoped and which, on the other hand, has always had its adverse critics. The most that can be claimed for it by its friends after more than twenty years of experience, is that the "dire predictions" have not been verified. In truth it would seem that the plan as yet has not been tried on a scale that could yield very large fruits either for good or for evil. The persons whom it is sought to aid are only selected groups of the lowest paid workers, generally limited to minors and young women, who in many cases are those of immigrant families in urban districts. A large volume of dis-

[8] See Vol. I, pp. 135 and 197.

[9] Much public regulation of wages occurred in Europe until near the end of the eighteenth century. In England this was done mainly by the justices of the peace and, in the main was directed toward limiting the demands of the wage-workers.

cussion on this subject has developed, mostly of an *a priori* nature, of which we may here touch only a few of the salient points.

At first glance the principles involved in the legislation limiting hours and those in minimum wage legislation may seem to be the same. But an important difference soon appears. In the former case the evil is that of a too long working period, injurious to health, and this can be reached directly and stopped by an efficiently administered law. But in the latter case the real evil is industrial weakness and incapacity such that the workers are unable to command "a living wage" in a competitive market. A minimum wage law, by itself, neither cures the industrial incapacity nor ensures employment to the industrially weak at any wage. The law does not attempt to compel employers to employ at the legal minimum wage every one who wishes to work; it merely declares that the employer shall *not* employ any one whom, in his employ, he finds to be not worth that high a wage.

§ 10. **Some problems of the minimum wage.** Unless the demand for a particular kind of service is absolutely inelastic (a rare if not impossible situation in a large market), there must be fewer jobs for the less capable workers at high than at low wages, other prices remaining the same. Further, some of the less capable workers must be crowded out of such jobs as remain; for an artificially higher wage attracts into an occupation some from other occupations before paid more highly. It seems to be admitted by the friends of minimum wage legislation that this result is logically to be expected and that to some degree it appears. Of course it is never possible to tell to just what extent workers have been and are being excluded in this way from any particular establishment or occupation. Forbidden to earn what they can, the poorer workers must become dependent on charity. It may be said, and perhaps truly: better this than underpaid labor destructive to the health of the workers and evil in its competitive effects upon other wage workers.

In most discussions of the wages of women there is a ready confusion of sympathetic ideals of what one would like to see with the cold facts as they are. Women's services (especially those of young women) have increasingly of late been coming upon the labor market in such a way as to cause abnormal congestion in a few occupations. Employers have not caused low wages in these cases. Partly these occupations are the clean, light, and agreeable ones, partly they have a relative social glamour, largely they can be followed for a few years near the home of the worker, nearly always they may be undertaken with brief training and little skill. Investigation has shown that at least eighty per cent of this group of girl workers live at home. A wage that is amply a "living wage" when used as a pro-rata contribution to an American family income is frequently insufficient for the girl living "independently." Such a girl is, under the conditions, unable to earn a living in her chosen occupation, and it may be better to recognize that fact and to deal with such individual cases as appear among the one fifth of all girls employed.

The one unquestioned service of the minimum wage law is that of diagnosing the evil of low wages rather than in remedying it. The minimum wage law brings to light the industrial incapacity of particular individuals to earn a living wage. The direct remedy is to abolish the incapable workers or their incapacity by such methods as regulating foreign or cityward immigration, custodial care of the physically, mentally, and morally weak, vocational guidance, and more effective measures of industrial education. Alongside of the abnormally low paid occupations or elsewhere in the industrial organization are other occupations in which with, or often even without, special training, the sweated workers could get, competitively, more than the minimum wage, if they could, or would, qualify for the work.

§ 11. **Mediation and voluntary arbitration.** The labor controversies in which the public has the largest interest as a

third party [10] are those which result or may result in strikes. The public interest becomes acute when a strike results in interference with the individual freedom of other workers and of nonparticipants, when it causes a blocking of the highways and disturbance of the peace, and when it prevents the regular production and transportation of the commodities which the public consumes. The public, therefore, has steadily become more interested in all methods and agencies designed to conserve better relations between employers and wage-workers, and to diminish or, if possible, to do away with strikes when individual and collective bargaining between the two parties fail.

Mediation, or conciliation, is the effort of a third party to get the two parties to a trade dispute to come together to agree peaceably upon a settlement. Mediation may be voluntarily undertaken in a particular case by any citizen or by a public official, usually the executive (mayor, governor, or President); or it may be by a regular public state or national commission charged with this duty (as in some 17 states).

Arbitration is the decision, by a disinterested person (or commission) to whom it is submitted, of the exact terms, after a provisional settlement of a dispute. It is voluntary when the parties agree in advance to accept the verdict, and compulsory when they are compelled by law to submit to arbitration and abide by the verdict.

Some provision either of voluntary private or of public agencies to mediate between the parties in labor disputes and to facilitate voluntary arbitration has been made of late in most communities of the civilized world, including 32 of our states, and the nation as a whole particularly in respect to disputes between railroads and train operatives engaged in interstate commerce.[11] No one objects to them, and they ac-

[10] See below, sec. 15.

[11] By the act of 1888, the Erdman act of 1898, superseded by the Newlands act of 1913, and supplemented by measures for mediation by the Department of Labor.

complish much good, but fail oftenest in the greater emergencies because of the unwillingness of one or the other party to submit the case, or because of lack of any power to enforce the decisions.

§ 12. **Compulsory arbitration.** The serious question in the subject of arbitration concerns the introduction of the principle of coercion by government, in compulsory arbitration. This, in principle, is pretty radically different from voluntary arbitration, for as it denies to the parties the right to settle their dispute by private agreement, it becomes in effect the legal regulation of rates of wages and conditions of work. In principle this was involved in the legal regulation of wages in England from the fourteenth to the nineteenth centuries. The plan is closely approached in the industrial courts that are now provided in a number of European countries for a cheap and expeditious settlement of small disputes regarding trade matters, arising in the relations between employer and employees. The new modern development began when New Zealand passed a compulsory arbitration act in 1894, followed to some extent since by all the other Australasian states, largely through the action of the Labor party. Through the operation of its act New Zealand came to be called the "land without strikes," tho the description was inaccurate, especially after 1907. The Canadian Industrial Disputes Act of 1907 is an example that has had influence upon public opinion everywhere, and has been followed to some extent in recent legislation in New Zealand, America, and elsewhere. It involves the compulsory principle in a limited degree, making it unlawful in public utilities and mines to change the terms of employment without thirty days' notice, or to strike or lock-out until after investigation and hearing before a board to be nominated for the purpose. The Colorado Act of 1915 goes even beyond the Canadian act in its scope. The plan seems destined to have wider applications and a larger development in the not distant future. Let us note the general attitude of the various interests concerned.

§ 13. **Organized labor's attitude toward labor legislation.** Labor organizations hitherto have been in their legal nature almost entirely private and voluntary. They are seldom incorporated and are rarely even recognized in any way by legislatures and by courts, which deal merely with the members as individuals.[12] Their private character, combined with their limited membership as compared with the total population, leaves them without the power to accomplish legally by themselves the results which they desire in their own interest. Hence they are tempted at times to usurp public authority over the field of private rights in industry.[13] In other cases, when they have come to the end of their unaided powers, they invoke the aid of the law to accomplish their objects. But the appeal of organized labor to the law is special and qualified, being confined to cases where the actions of others are controlled to the advantage of the union, such as regulating the work of women and children, controlling the acts of employers in respect to construction of factories, and limiting the length of trains. This does not imply a peculiarly selfish attitude on the part of organized labor. Action together in any social group always develops in men their loyalty and spirit of coöperation without always making them more considerate to those outside of their group. Indeed, often men acting through their chosen officials, private or public, are more selfish collectively than they are individually. The leaders of any group of men, whether of wage workers, merchants, manufacturers, or political constituents, find it necessary to show that the interest of their supporters rather than a broader "sentimentality" is uppermost in their thought. And further, the jealousy of any limitation of their power is

[12] The few exceptions to this statement are mostly recent; such as the recognition of the unions in New Zealand in 1894 as parties in the plan of compulsory arbitration, and in Great Britain in 1909 as agencies through which unemployment insurance may be administered.

[13] As appeared in ch. 20.

as powerful a motive in one group of men as in another. All are made of the same human clay. But the stronger and more successful a labor organization is, the more vigorously do its leaders resist any legislation that limits the functions and field of action of the labor leaders, or that settles labor troubles in a way that makes the voluntary labor organization less necessary to the individual worker. Of course self-help, as a spirit and as a policy, is a virtue, if it does not sacrifice the rights of others. But if the facts above suggested are borne in mind they will help to explain the otherwise often puzzling attitudes of organized labor toward different measures of social legislation.

§ 14. **Organized labor's opposition to compulsory arbitration.** Organized labor in America has attained to a highly influential position. On the whole it constitutes an "aristocracy of labor," consisting largely of skilled workers that obtain a wage exceeding that of unskilled workers to a degree not seen anywhere else in the world. In this they have been favored by a combination of conditions which it is not possible to describe briefly; suffice it here to say that organization is itself not the whole explanation, but only a small part of it. That organized labor, officially, is strongly opposed to compulsory arbitration in America, is thus perhaps sufficiently to be understood on the principle of "Let well enough alone." When in August, 1916, a strike on the entire railroad system was threatened by the four railroad brotherhoods, and some action was proposed in the form of the Canadian act, the trade-union officials issued a statement containing these words: "Since the abolition of slavery no more effectual means has been devised for insuring the bondage of the workingman than the passage of compulsory investigation acts of the character of the Canadian Industrial Disputes Act." Within less than a week the brotherhoods called off the strike after Congress had passed an act giving the men immediately the eight-hour day—a substantial part of what they had asked—and

providing for investigation, by a commission, of the effects of the rule. This is compulsory upon the railroads but it is not compulsory upon the men to accept these terms.

§ 15. **The public and labor legislation.** It has come to be recognized that in every serious labor dispute, especially in such as develop into strikes, those concerned are not merely the two parties, employers and employees, but a third party, the public, consisting of every one else whose interests are not directly or indirectly bound up with one of the other two parties. The line of demarcation is not easy to draw exactly. An individual may be divided in sympathy, inclining to the one party perhaps because of some personal friendships or class loyalty or to the other party because of material investments, while in the main having interests distinct from either. But wherever the public is drawn in as a party, it includes far more persons and embraces far larger interests than does either of the other two parties or than do both of them together. The public becomes a party primarily because it consists of the purchasers and consumers of the products, who are deprived of the usual supply of goods, more or less essential to their welfare or even to their existence. With the increasing division of labor and complexity of industrial organization more and more kinds of business have, in a greater and greater degree, become "affected with a public interest." The public becomes an unwilling party, therefore, in every serious labor controversy.

In order that any kind of labor legislation shall be enacted, it is necessary (so far as we have a government by public opinion) for a majority of the public to be convinced that the conditions are such as call for governmental interference. It becomes so convinced in two broadly distinguishable classes of cases: one, when the masses of unorganized workers are too weak to secure for themselves conditions of work and wages consistent with health and morality; and the other, when strong bodies of organized workers, in their at-

tempts to win their ends in an industrial dispute, exceed their private rights and invade the public welfare.

§ 16. **The public and compulsory arbitration.** Where the railways are owned and operated by the state (as is now the case pretty generally except in America and Great Britain) the question of the "right to strike" arises from time to time, in critical forms. The logic of the situation compels even those officials that are of the labor party or are most favorable to labor, to maintain an uninterrupted service on the public railways. The experiences of that nature in France and in Australasia have been notable. Nowhere in the United States has the principle of compulsory arbitration been adopted, but at the time of the great anthracite strike, in 1902, public sentiment grew strong in favor of it. As a result of the intolerable conditions in the mines of Colorado was passed the compulsory investigation act of 1915 in that state. In 1916 the threat of a general railroad strike brought from many quarters strong expressions of condemnation in principle, of the strike as a method of settlement of wage disputes on the railroads. And in the end the organized laborers themselves accepted, apparently with much satisfaction, a law involving the legal fixation of wages and the principle of compulsion as applied to the employers.

CHAPTER 22

OTHER PROTECTIVE LABOR AND SOCIAL LEGISLATION

§ 1. Evils of early factory conditions. § 2. Improvement of factory conditions. § 3. Limitation of the wage contract. § 4. Usury laws. § 5. Public inspection of standards and of foods. § 6. Charity, and control of vice. § 7. City growth and the housing problem. § 8. Good housing legislation. § 9. General grounds of this social legislation. § 10. Training in the trades. § 11. Prevalence of unemployment. § 12. Evils of unemployment. § 13. Definition of unemployment. § 14. Individual maladjustments causing unemployment. § 15. Maladjustment of wages causing unemployment. § 16. Individual maladjustment in finding jobs. § 17. Public employment offices. § 18. Fluctuations of industry causing unemployment. § 19. Remedies for seasonal fluctuations. § 20. Reducing cyclical unemployment and its effects.

§ 1. **Evils of early factory conditions.** The time is but brief in the life of nations since the main manufacturing processes, now mostly conducted in great factories, were carried on in or near the homes of the workers. This change has been reflected in the meaning of "manufactures," which first meant literally goods made by hand but now conveys the thought of goods made by machinery. The craftsmen worked alone in their own homes or with the help of their wives and children. If the master craftsmen had other helpers these were usually lodged and fed in the homes, and were taught by the side of the masters' own families. The old English law of master and servant was the labor law of that time as, to some extent, it still is to-day in Great Britain and America. The living and working conditions of the wage-workers were in general the same as those of the master him-

self and of his own family; and this was the best possible guarantee that the conditions would be kept up to the best standards of that time. The same change in industrial relations that led to the rise of the organized labor movement[1] revealed new and often horrible neglect and evil in and about the factories. They had been erected with no thought of sanitation, safety, and decency for the workers.

§ 2. **Improvement of factory conditions.** Legislation to remedy these evils began in England a century ago, and the English code of factory laws, regulating the construction and operation of factories and providing for their inspection, has become voluminous. It has been copied, and in some respects improved, by all of the great industrial nations. This is true in America of the manufacturing states, tho the agricultural states have still very few such regulations. As a result of these measures, accompanying and stimulating an enlightenment of the employers' self-interest, there has been a very remarkable improvement in such matters in recent years. In many American factories erected in the last quarter-century the conditions as to lighting, heating, ventilation, stairways, fire-escapes, protection of the workers against accidents, and lavatory and sanitary arrangements, are better than the best conditions ever existing in domestic manufactures. A somewhat corresponding improvement has taken place on railroads, in mercantile establishments and, perhaps less, in mining.

Factory legislation often has been opposed by employers because of the expense it causes; but if the regulations apply to all factories, the expense becomes a part of the cost of production and is shifted, like the other expenses of production, to the general body of consumers, of which the employers form only a small part. Much of the recent progress in some establishments has, however, gone much beyond the requirements of any existing laws. Many employers recognize that it is costly and unprofitable to themselves to allow their workmen to be in surroundings that reduce their vitality and ef-

[1] See above, ch. 20, sec. 1.

ficiency, such as do the conditions mentioned at the close of the preceding section.

§ 3. **Limitation of the wage contract.** In general the law does not attempt to interfere with the making, by individuals, of such contracts as they choose to make. Its main function is to interpret and enforce the contracts that are made. But there has been an increasing group of exceptions to this general statement. It was forbidden even by the English common law for wage-workers under some conditions to sign away their right to claim damages in case of accident, and many recent statutes have added more specific limitations in this respect.[2] Legislatures and courts have been particularly watchful of the interests of children, who are usually deemed incapable of entering into contracts binding them to their injury. Sailors, likewise, have been somewhat exceptionally treated, because, journeying far from home, they are under the often despotic control of their employers. The English courts may even change the contract if the sailors have been coerced by their masters.

Laws regulate the form, time, and methods of payment in manufactures and mining. Companies sometimes keep stores and pay the workers in mines and factories in goods instead of money. Such a store in the hands of a philanthropic employer might easily be made, without expense to himself, a great boon to his workmen, giving them the benefits of consumers' coöperation. But the usual result is told by the fact that such stores are often known as "truck stores" and "pluck-me stores," and heartily disliked by the wage-workers. They are most often found where some one large corporation dominates in the community, as in a mining district, and the workers are in a very dependent condition. If the higher prices demanded practically lower real wages, it would seem that the worker had an immediate remedy in his power to demand higher money-wages. Recognizing that this is for the most part an illusion—for it is just in such places that the

[2] See ch. 23, secs. 5–7, on the old law of employer's liability.

conditions for free competition are least present—the law in many states prohibits these stores. It regulates also the measuring of work, fixing the size of screens and of cars used in coal-mining. The law is especially favorable to the hand-laborer in regard to the collection of his wages, requiring monthly or fortnightly or sometimes weekly payments. Mechanics' liens give to workmen in the building trades the first claim upon the products of their labor.

§ 4. **Usury laws.** The limitation by law of the rate of interest that may be charged affects many persons outside the ranks of wage-workers. Usury laws are found almost universally in civilized lands. By usury was formerly meant any payment for the loan of goods or money; now it means only excessive payments. In former times moralists and lawmakers were opposed to all usury or interest. The reason for this attitude is not hard to find.[3] Most loans were made in times of distress. The sources of loanable capital and the chances of profitable investment were few. But for the last four centuries there has been on the question of usury a gradual change of opinion, beginning in the commercial centers and progressing most rapidly in the countries with the most developed industry. A moderate rate of interest is now everywhere permitted; but in all but a few communities the rate that can be collected is limited by law, and penalties more or less severe are imposed upon the usurious lender.

Usury laws are practically evaded in a number of ways within the letter of the law.[4] Many persons maintain that they do more harm than good even to the borrower, whom they are designed to protect. In a developed credit economy, where a regular money-market exists, they are superfluous, to say the least, as most loans are made below the legal rate. Such laws, however, have a partial justification. In a small loan market they to some extent protect the weak borrower at the moment of distress from the rapacity of the would-be usurer. There has been great need to check the rapacity of

[3] See Vol. I, pp. 292–293. [4] See Vol. I, p. 304.

the "loan-shark" in the cities. Usury laws are fruits of the social conscience, a recognition of the duty to protect the weaker citizen in the period of his direst need. Their utility is diminishing, and at best they are only negative in their action, preventing the needy borrower from borrowing when his need is acute. In many European countries a more positive remedy has been found in the provision of public pawnshops. In America a very little has yet been done in this way, and that mostly by private philanthropy.[5]

§ 5. **Public inspection of standards and of foods.** The determination and testing of standards of weights and measures has long been a function of government. English laws of the Middle Ages forbade false measures and the sale of defective goods, and provided for the inspection of markets in the cities. Usually, the self-interest of the purchaser is the best means of ensuring the quality of goods; but personal inspection by each buyer frequently is difficult and time-consuming, requiring special and unusual knowledge of the products and special costly testing apparatus. The states and the nation undertake, in some cases, therefore, to set minimum standards of quality, and to enforce them by governmental inspection. Government coinage had its origin in this need.

This policy is applied, however, mainly to commodities affecting health; its application to art products, except to protect the morality of the community, would be difficult or unwise. Recent legislation in many lands and in all of the American states has developed greatly the policy of insuring the purity or the safety of many articles consumed in the home; notable is the Federal Pure Food and Drug Act of 1906. The federal law levying a tax on oleomargarine, however, was designed as protective legislation in the interest of the farmer. Public regulation and inspection sometimes raises the price, but the cost is small compared with the convenience and the benefits resulting to the citizen.

§ 6. **Charity, and control of vice.** The public relief of

[5] See Vol. I, pp. 293 and 303.

the defective classes, insane, feeble-minded, and paupers, is a part of the social protective policy. The public interest undoubtedly is served by having these suffering classes systematically relieved, but the extent and nature of the provision are questions ever in debate. Still more debated is temperance legislation, both as to licensing and as to prohibiting the liquor traffic. Nowhere is the manufacture and sale of intoxicating liquor treated quite like the traffic in most other goods, because it is recognized that the public interest is affected in a different way. While it is beyond question that society should protect itself and its innocent members against the drunkard, it is more doubtful whether it owes to the man, for his sake, protection against his own blunders. Not even the gods can save the stupid. Temperance legislation is strongest in its social aspect. The opponent of it usually champions the individualist view; its partizans uphold, in varying degrees, the social view.

Similar questions arise regarding lotteries, gambling, betting, and horse-racing. When a man backs a worthless horse against the field, money probably is transferred from the stupider to the shrewder party. The philosopher may say that the sooner a prodigal and his money are parted the better; but the broken gambler remains a burden and a threat to honest society. Gambling, lotteries, and speculation cause embezzlement, crime, unhappy homes, and wrecked lives.[6] Here are to be found with difficulty the true boundaries between ethics and expediency. A busybody despotism may protect the fool, but it thereby helps to perpetuate and multiply his folly; yet if the fool is left alone, he too often is a plague to the wise and the virtuous.

§ 7. **City growth and the housing problem.** In 1790, of our population only 3 per cent lived in cities of over eight thousand inhabitants; in 1900 the percentage was 33. Then the largest city (Philadelphia) numbered 50,000; in 1910 the largest city (New York) numbered 5,500,000; that is, 110

[6] See above, ch. 12, sec. 2.

times as large 120 years later. The total number of persons living in cities of 8000 had increased in more than double that ratio. The rapid growth of cities brought with it many evils. Considered in their more material aspects, nearly all of these are summed up in the expression "the housing problem."

As population grows denser in cities, land rises in value, yards and gardens narrow and then disappear, light, sun, and air are shut out, and cleanliness, decency, and home life become more difficult and, for many, impossible. The residents gradually group themselves in districts corresponding to their economic incomes, and the poorer parts of the population become tenement dwellers in the neighborhood of factories or become segregated in "slum" districts of unsanitary and dilapidated houses.

§ 8. **Good housing legislation.** Two policies are open under these conditions. The one, always followed for a time, is to leave individual self-interest unguided to solve the problem. If the tenant agrees to rent a disease-breeding house, he is the first to suffer. The interests of investors, it is said, will supply as good a house as each tenant can pay for. The other policy now adopted is to set a minimum standard of sanitation and comfort, in respect to plans, lighting, materials, and proportion of lots to be covered, to which standard all builders and owners must attain. Complying with the legal requirements, they are left free to collect whatever rent they can get. As one bad building may bring down the rent of all on the street, such legislation may sometimes be in the interest of the body of landowners as against the selfish desires of some individuals. Mainly, however, the regulation is in the interest of the tenants and of society as a whole, and against that of the landlords. The rents from slum property are threatened, hence the strong opposition always manifested against tenement-house legislation by some landlords, architects, and contractors, who fight it as an interference with their interests and as a confiscation of their property. It is

not unlikely that this policy has the effect of making rents too high for some poorer tenants and driving them into the country.. But this result is not so undesirable. Moreover, the control and inspection of housing conditions has in a few states been made statewide to reach even "the country slums" which lately have been recognized to exist. Enlightened sentiment to-day favors efforts to destroy the breeding-places of disease, misery, and crime, no matter where they may be.

Property owners are in many communities no longer left free to determine height of buildings, appearance, or even the uses for which houses may be erected in any district. American cities have still much to learn in this regard from the example of many European cities which have developed the art of city planning with wonderful results in beauty of landscape and of architecture, in practical economy for business, and in the health and welfare of the mass of the people.

§ 9. **General grounds of this social legislation.** Why are not such matters as we have been discussing safely left to individuals? It is for the interest of every one that his back yard should not be a place of noisome smells and disagreeable sights. But men are at times strangely obstinate, selfish, and neglectful, and through one man's fault a whole community may suffer. The refusal of one man to put a sewer in front of his house may block the improvement of a whole street. The heedlessness of one family may bring an epidemic upon an entire city. There must be a plan, and by law the will of the majority must be imposed upon the unsocial few. Where voluntary coöperation fails, compulsory coöperation often is necessary. Thus health laws, tax laws, and improvement laws regulate many of the acts of citizens, limit the use of property, and compel men to better social courses against their own wishes and judgments.

All such laws as these are protective legislation, in that they depart from the rule of free trade taken in its broadest sense. It does not follow, however, that all these laws stand or fall together. The justification of such measures is limited and

relative, and therefore of varying strength. All protective measures are alike in that the free choice of one citizen is forbidden by law in the supposed interest of some other citizen who is to be "protected." While the purpose of the tariff is economic and political, in a large majority of social laws the moral purpose is fundamental. It is the demand of humanity that competition be placed upon a higher plane. Most social legislation is to protect the weak from being forced into contracts, or from living in conditions injurious to their welfare and happiness. The justification for these limitations upon the right of private property, upon the free choice of the individual, upon "free competition," must be found in the social result secured. The best test of social protective laws is their contribution to a higher independence and to a freer competition on a higher, more worthy, and more humane plane.

§ 10. **Training in the trades.** Free elementary and secondary education has become the all but unquestioned public policy in the American commonwealths. The main motive for it has been the belief that education in books is a necessity for good citizenship in a republic. At the same time it has been thought that the training of the school would help the child to earn a living. This appears to have been true so long and so far as it was combined with, or supplemented by, industrial training on the farm, in the home, and through apprenticeship in the manual trades, as once was so prevalent. But industrial conditions have changed. Most of the old-time education of the schools has now little relation to the industrial life of the great majority of the children, for few enter clerical or professional callings. Germany was the first nation to recognize the new educational need (in fact, never as urgent there as here) and to provide for systematic and efficient training in all the industrial arts. Since the beginning of the century the American public has been awaking to the needs of the situation. We appear to be on the eve of a great development in industrial training that will equip youth for more

efficient life in business and in the home, either in rural or in urban conditions.

§ 11. **Prevalence of unemployment.** Many other forms of social legislation on behalf of the common man might well deserve, did time and space permit, a larger measure of the economic student's attention. However, excepting the subjects treated in the next two chapters, the one remaining that is most important at this time is the problem of unemployment.

In every country and at all times where the wage system prevails, some wage-workers, now more and now less, are "out of work" and unable to get it. The proportion that they constitute of all workers cannot, with the aid of any existing statistics, be exactly told, nor can exact comparisons be made between different countries. Of the magnitude, importance, and difficulty of this "problem of the unemployed" there is, however, no question. It is greatest, speaking generally, in manufacturing industries, tho, among the various kinds, great differences in this respect appear. In 1900 the United States census reported that of all persons in gainful occupations 2.5 per cent had been unemployed more than half the year, 8.8 per cent from three to six months, and 11 per cent one to three months, a total of 22.3 per cent more than one month.[7] In 1911 in a large group (nearly all) of the manufacturing industries, the minimum number of wage-earners employed (in January) was 13 per cent below the maximum (in November). In some the difference was much greater (e.g., 24 per cent in the iron industry, 63 per cent in the brick and tile industry). Statistics of unemployment among trade-unions in New York and Massachusetts indicate that the annual average of unem-

[7] Great importance should not be attached to these figures for they contain errors resulting from the inexact notions of inexperienced enumerators as to what constitutes unemployment, and from the inclusion of all persons gainfully employed, whether self-employed or in professional, salaried, or wage-earning positions.

ployment is between 12 and 15 per cent. In some years upwards of 10 per cent of all the working time of the wage-earning population is lost by unemployment.

§ 12. **Evils of unemployment.** A considerable part of the total in an ordinary year may be set aside as "normal" in the sense that it is allowed for in the wage-workers' plans;[8] and a part of it may even be desirable. Yet there remains an inconceivable sum of suffering in the lives of the workers, and an enormous economic waste of productive energy not only for them but for the whole community. The irregularity, and occasionally the excessive duration, of these periods of unemployment too often makes unemployment not a beneficent vacation (comparable to shorter hours), but a period of tragic anxiety, demoralizing and unfitting for return to work. Irregular work is generally recognized to be a greater cause of poverty and of actual pauperism than is a low wage regularly received.

§ 13. **Definition of unemployment.** Unemployment is the state of a wage-worker for the time out of a job. But this definition needs to be further explained and limited if it is to be useful in the discussion of unemployment as an evil calling for social remedy. There must be set aside the cases where the lack of a job is due to one rest day in seven and to legal holidays, a total of nearly 65 days in most American states; to the worker's being on strike; to temporary sickness; finally, and more difficult to distinguish, that due to continued disability, physical, mental, or moral, to do the work up to an acceptable standard and to retain a job in the occupation chosen by the applicant. The first cannot be called a problem, and the others constitute the problems of strikes, of industrial sickness, and of the unemployables, respectively.

There still remain some unanswered questions such, for example, as: whether in seasonal trades (e.g., teaching, or the building trades) allowance should be made for normal vaca-

[8] See Vol. I, p. 207, on irregularity of employment as influencing wages, psychic income, and choice of employment.

tions and for slack times, not to be counted as unemployment; and whether lack of work at one's principal occupation is ever or always unemployment when the person is actually employed or can get work at some lower paid employment. The more frequent answer to these questions is in the negative but this in some cases is almost palpably absurd. Further study is necessary to work out a generally acceptable concept of unemployment.

§ 14. **Individual maladjustments causing unemployment.** The cause or causes of the evil must be ascertained before a remedy can be intelligently applied. It is pretty generally agreed that unemployment is essentially a problem of maladjustment of the labor supply, and not that of an absolutely and permanently redundant supply. That is, there is, under static conditions, work for all to do at various rates of wages that would bring about a value equilibrium of services.[9] The maladjustments are either of an individual or of a general character. Individual maladjustment may be due to a mistake in choosing an occupation (e.g., through the vain ambition of one unfitted to be an artist, actor, lawyer, or teacher); or to failure to acquire by adequate training the necessary skill; or to loss of capacity by accident, old age, or failure of mental or moral powers; in all of which cases the problem verges upon or becomes that of the unemployable. The "can't-works" and the "won't-works" must be divided from the "want-works." If there is any remedy in such cases it must be through re-education, personal reform, or change of occupation.

Many persons look upon this type of cases as almost wholly accounting for the problem of the unemployed. They are confirmed in this opinion by the fact that the out-of-work group in any trade at any time is, on the average, the least efficient group of workers in the trade. This results from selection by the employers. This selection is due to the *rela-*

[9] On static, see Vol. I, ch. 32; on the scarcity of labor, see Vol. I, ch. 18, sec. 2 and references there; on value of services and wages see Vol. I, ch. 18, especially sec. 3, and ch. 19, especially sec. 7.

tive not to the *absolute* efficiency or inefficiency of workers, and must result whenever there are any discoverable economic differences in the workers (all things considered) that are employed at the same wage. This would continue even tho the poorest workers were to raise their efficiency above that of the best men now retained. "Personal inefficiency" may explain a chronic low wage or absolute unemployability in a particular case, but it does not explain intermittent lack of work for those willing and able to work. Unemployment is a social problem and not merely an individual problem.

§ 15. **Maladjustment of wages causing unemployment.** It seems highly probable that the artificial maintenance of a wage above the competitive, or value-equilibrium, rate of the individual, whether this be done by sympathy, by custom, or by the action of trade unions, must cause some maladjustment of workers in relation to available jobs and thus increase unemployment. To doubt this is again to maintain the absolute inelasticity of the demand for labor with changes in its price.[10] If the true equilibrium wage in a certain industry were $3.00 a day, then a wage of $4.00 a day would attract to the trade more than enough workers to meet the demand for labor in normal periods (unless entry to the trade is controlled by monopoly power), and at length the losses from unemployment would balance the day-wages received in excess of the rate obtaining elsewhere for that quality of labor. Any artificial obstacles to change of occupation or to concessions in the kind of work done and in the rate of wages must operate to increase the maladjustment. So far as this maladjustment occurs, it may cause unemployment neutralizing the apparent gain of higher day-wages obtained by monopoly power. The very inertia of wages, however, in new price situations [11] makes the wage-workers resist more vigorously such a policy of wage concessions. Moreover, the difficulty here indicated is more particularly one occurring in static conditions and is to be

[10] See above, ch. 21, sec. 9 on the minimum wage.

[11] See Vol. I, p. 223, on friction in the adjustment of wages.

distinguished from the dynamic maladjustments next to be considered.

§ 16. **Individual maladjustment in finding jobs.** Another kind of individual maladjustment is the failure of the jobless man to connect with the manless job. A certain amount of this maladjustment must exist in the most stable industries and in the most settled industrial conditions. Fluctuations occur in the market demand for the products of various establishments, requiring the taking on or laying off of some men. Fluctuations occur in the plans both of employers and of wage-workers as a result of age, of removal, for reasons more or less non-economic, of desire to change occupations, of variations in health, and of countless other causes. The needs of the employer for a worker, and of the worker for a job, are mutual. To a large degree these various fluctuations are mutually compensatory, workers going and coming, orders increasing here and decreasing there. Total jobs and total workers capable of filling the jobs, are at any moment in normal times equal quantities, if they can be brought together. But almost everywhere is lacking a real labor-market. The substitutes for it are largely ineffective: trade-union action, employers' associations, "want ads," cards in shop windows, weary walks from door to door, lines of waiting men outside of factories, private employment agencies. At their best the private employment agencies perform valuable services within limited fields, but they are uncoördinated, and utterly inadequate to meet the chief need, and at their worst they are the instruments of great abuses against the unemployed.

§ 17. **Public employment offices.** Vigorous efforts to create local "free employment offices," or "labor exchanges," began in a number of countries about 1895. The movement gained headway in the next ten years and has since steadily grown. In Germany the chief exchanges have been founded and conducted by the municipalities (while others are controlled by the unions and by groups of employers) and have remained largely decentralized, tho coöperating to some extent

through voluntary state conferences of officials of the exchanges, and since 1915 required to report to the imperial statistical office. The total number of exchanges in Germany (in 1915) was nearly 3000. The general results have been remarkably good, altho not completely satisfactory.

Every industrial country of Europe has done something of this kind. Great Britain, however, after some experiments with a similar local system, established in 1909 the first national system of "labor-exchanges." In America the movement is developing in three directions, through municipal, state, and federal offices. These are united (since 1913) in an "American Association of Public Employment Offices." In 1915 there were known to be 99 state and city employment offices distributed through 30 states, besides federal offices operated in 18 cities in connection with the Bureau of Immigration. The clearly recognized task is now to coördinate these various agencies into an efficient national system, eliminating partizan politics and elevating the management of all branches to the plane of professional service. Through these agencies can be operated an industrial service, analogous in function to the weather bureau, and reporting from day to day the pressure of demand and the prospects for labor in the various parts of the country. The economic results of a complete, exclusive, and efficient service of this kind would far exceed its legitimate cost to the community.

§ 18. **Fluctuations of industry causing unemployment.** Any one of the maladjustments in employment thus far considered may occur at a given moment, in static conditions of industry. But there are also maladjustments resulting from more general industrial changes throughout a period of time. The two main types of these are seasonal and cyclical changes, the one occurring within a year, and the other occurring within the longer period of the business cycle. At the downward swing of these seasonal and cyclical changes the number of would-be workers exceeds the number of jobs[12] and the re-

[12] See above, ch. 10, secs. 6 and 7, on the industrial crisis.

sulting unemployment is greatest when the minor and the major swings are both downward, about midwinter in a period of industrial depression. Thus in 1893–94, and to a lessening degree in 1894–95, 1895–96; in 1907–08, and 1914–15. Of course employment offices alone are no remedy for the exceptional difficulties of such times, and the individual, whether he be an unfortunate "out-of-work" or a more fortunate well-wisher, feels helpless in the face of the overwhelming burden of distress. Such a situation is declared by the radical communists to spell the bankruptcy of the wage-system; while the most conservative students of the subject confess that this periodic chaos in the labor market is the strongest indictment of, and involves the gravest dangers to, the existing economic and social order.

§ 19. **Remedies for seasonal fluctuations.** But of late there has been a growing hope that an answer may be found to this economic riddle of the Sphinx. A number of different measures are being experimentally tested and applied. Many years of effort will be required for the perfecting of these plans separately and collectively. Some of these plans may be here indicated, however briefly. To remedy seasonal fluctuations within the establishments output may be regularized by taking orders in advance; by producing various products successively in the same factory; by overcoming weather conditions as has been done successfully in brick and tile making, ditch digging, and building operations; by transferring workers from one department of an establishment to another; by improving the employment departments so as to build up a more stable force, thus reducing the great expense of "hiring and firing" and the loss through training "green hands"; by varying the length of the working day while keeping the same working force throughout the year; by coöperating with other industries to build up a regular working force and transferring it from one establishment to another with seasonal changes.

Of great aid in a number of these measures is a broader industrial training for the workers, making them more able to

change from one occupation to another. For this purpose every period of unemployment and of temporary shortening of the working day ought to be used as a time for trade education, by the recently devised and successfully applied "short-unit courses for wage-earners."[13]

§ 20. **Reducing cyclical unemployment and its effects.** The maladjustments due to the movement of the business cycle are even more difficult to remedy completely, but are diminished by every measure that helps to reduce the great financial fluctuations.[14] Further, many communities have already begun to plan large public works more systematically so that they may be carried on mainly when private business is more slack. A comparatively small amount of such work would serve as a gyroscope to preserve the balance of employment for a large part of the less skilled workers. It has been estimated by Bowley, an English statistician, that in the United Kingdom, it would be necessary to set aside only 3 per cent of the annual expenditure for public works to be used additionally in years of industrial depression, in order to balance the wage loss at such times. This is a well-nigh incredibly small proportion, hardly as great as that of the weight of the gyroscope compared with the car or ship to which it is applied. It is hardly to be doubted that hitherto, in America, public undertakings have been executed much more largely in periods of business prosperity, and have been diminished during "hard times," thus greatly accentuating the harmful swing of the labor-demand. Finally, unemployment insurance, which has already been applied by parliamentary legislation in Great Britain to a group of nearly 3,000,000 wage-workers, is an indispensable and highly hopeful measure of relief. The place of this in a general system of industrial insurance will be indicated in the next chapter.

[13] See Bulletin of the United States Bureau of Labor Statistics, No. 159 (April, 1915).

[14] See above, ch. 8, secs. 6, 7; ch. 9, secs. 6, 8; ch. 10, secs. 14, 16; ch. 14, sec. 12.

CHAPTER 23

SOCIAL INSURANCE

§ 1. Purpose and meaning of social insurance. § 2. Increasing need of social insurance. § 3. The new era of social insurance. § 4. Features of social insurance. § 5. Historical roots of accident insurance. § 6. Development of compensation for accidents. § 7. The compensation plan in America. § 8. Standards for a compensation law. § 9. Historical roots of sick-insurance. § 10. Need of sick-insurance in America. § 11. Old-age and invalidity pensions. § 12. Unemployment insurance. § 13. Need of ideals in social insurance. § 14. Insurance rather than penalty. § 15. The compulsory principle. § 16. State insurance and a unified system. § 17. The contributory principle.

§ 1. **Purpose and meaning of social insurance.** In importance surpassing at present any one of the various measures on behalf of the wage-earning class that have thus far been considered is the remarkable development now under way of plans and agencies to provide insurance for "the common man." Insurance means making some kind of provision out of present means, so as to reduce the injury and suffering that would result from a future mishap. Usually, likewise, it implies uniting with others to distribute the expense fairly over all in the group. Social insurance is the term most frequently applied to the various institutions and plans provided, more or less under the regulation of law, for the protection of the lower-paid workers in most modern countries. The terms industrial insurance and workingmen's insurance are likewise used. The principal types of events for which social insurance in its various branches provides, are (1) accident, (2) sickness, (3) incapacitation (either by old age or by invalidity, that is, permanent failure of health within the normal working

years), (4) death (generally called "life" or "survivor" insurance), and (5) unemployment.

The direct aim of social insurance is not to prevent these mishaps (tho that may be an indirect result), but it is to provide some financial indemnity for the economic loss and expense involved in the mishap. The principal kinds of losses are two. First, that occasioned directly in caring for the sick or injured person, the expense of medical attention, nursing, hospital care, drugs and special apparatus such as crutches and glasses, and burial expenses. The second is the loss of income because of inability to work as a result of injury, of illness, or of permanent disability, or (in the case of life insurance) of the death of the bread-winner, or of want of employment.

§ 2. **Increasing need of social insurance.** In various connections we have observed how the changes that have been occurring in modern times have increased the uncertainties of the industrial life and of the earning power of the mass of the workers.[1] It should be further observed that in city conditions, a working family does not have, as in agricultural conditions, the supplementary sources of income from garden, field, forest, and stream, and it is not so possible to use the earning power of children, of old people, and of the partially disabled. The faster working pace of factories, the rapid fluctuations of employment with changing fashions, inventions, shifts of population, and waves of industrial prosperity and depression, all have introduced new risks and problems into the worker's life. The increasing payment of wages in money, and the more temporary nature of employment of men in many kinds of factory work, have added to the problem. With these changes have come a growing interest in the welfare of the mass of the workers and a growing sense of responsibility on the part of the public.

There is an appalling mass of misfortune in the United

[1] See above, ch. 2, sec. 14; ch. 10, sec. 7; ch. 20, sec. 1; ch. 22, secs. 11–18.

States requiring social insurance for its relief, altho satisfactory statistics of the various types of misfortune are still lacking. On the basis of the experience of private industrial insurance companies it appears that there are not less than 25,000 fatal industrial accidents yearly, and 700,000 injuries causing disability for more than four weeks, to say nothing of the enormous number of slight injuries—if injuries, many of them very painful, disabling for a period from one day to four weeks, should be called slight. As to loss of time due to illness, the experience of Germany shows an average of eight or nine days a year per worker, which figure, applied to those gainfully employed in America, would mean nearly 300,000,000 days of illness, or 1,000,000 one-man working years, causing a loss estimated to be $750,000,000 annually.

It is estimated that one in eighteen of American wage-workers attains the age of sixty-five with no financial provision for old age, and that about 1,250,000 persons above the age of sixty-five are dependent on their families or on charity, public or private, receiving $250,000,000 yearly.

The losses and suffering to dependents due to the death of the bread-winner are very partially accounted for by accidents, but no estimate of much value can now be made of the other cases. Some notion of the losses from unemployment has been given in discussing that subject in the preceding chapter.

§ 3. **The new era of social insurance.** Some not insignificant attempts to deal with these problems were made throughout the nineteenth century, but the new era of social insurance may be said to date from the message of the Emperor William to the German Reichstag in 1881, in which he said:

> We consider it our imperial duty to impress upon the Reichstag the necessity of furthering the welfare of the working people. . . . In order to realize these views, a bill for the insurance of workmen against industrial accidents will first of all be laid before you; after which a supplementary measure will be submitted, providing for a general organization of industrial sick-relief insurance. Likewise, those who are

disabled in consequence of old age or invalidity, possess a well-founded claim to more relief on the part of the state than they have hitherto enjoyed.

The program here outlined was carried out by the enactment between 1883 and 1889 of a series of laws, which taken together constituted a pretty effective system of social insurance for the mass of wage-workers in the German Empire. Later amendments have extended and improved the various features of the plan, which has served as a stimulative example to other countries. America has been the tardiest among all the industrial nations to undertake this kind of social reform.

§ 4. **Features of social insurance.** The plans of social insurance, in force in various countries, present a great variety of features combined in many ways. The main characteristics in which they may differ relate to (1) the element of compulsion, (2) contributions by the insured, (3) the nature of the insurance organization.

Insurance may be *voluntary* or *compulsory*. It is voluntary when the state simply encourages the formation of insurance agencies, and perhaps contributes something to them, leaving it to the individuals to insure themselves as they choose, in mutual societies, or in privately managed companies. In the case of accident insurance, however, there is often a semi-compulsion by which the employer is required to pay indemnity to his workers, according to fixed scales of compensation, but is left free to insure himself against this risk or not as he pleases, in which case it is still called voluntary insurance. Compulsory insurance is that which the state requires to be provided by means of some mutual organization of the insured, or of the employers, or by the state.

Insurance may be *contributory* or *noncontributory*. It is on the contributory plan when the insured workers contribute something toward the premiums that provide the funds for eventual payment. It is noncontributory when the funds are

provided either by the employers or by the state without any payments from the insured.

Insurance may be (a) in *private* companies, carrying on the business for profit; or (b) in *mutual* companies of workingmen, or of employers insuring themselves against the cost of compensation in case of accident to their employees; or (c) in a *state* bureau, or fund, organized and conducted by government.

§ 5. **Historical roots of accident insurance.** The different kinds of social insurance had different origins, some knowledge of which is necessary to an understanding of the present situation. These origins still affect the nature of social insurance to-day, and have prevented the development of a truly unified and logical system in accord with present conceptions of needs and of justice.

Accident insurance had its beginnings in the liability of employers for accidents that happened as a result of the employer's negligence, a principle found to some degree in all countries. Thus the earlier payments to workers in cases of accidents were not insurance indemnity but merely damages collected in court for the fault of the employer. In Great Britain and the United States, indeed, by judicial interpretation the law grew more strict as against the claims of the workers, until about 1880 in Great Britain and 1910 in the United States. To collect damages it was not enough for the workman to prove the employer's negligence, for collection was made more difficult by (1) the doctrine of contributory negligence, (2) the doctrine of the assumption of risk, and (3) the fellow-servant doctrine.

By the doctrine of contributory negligence, the workman's claim could be defeated by showing that he had by his carelessness contributed to the accident even when the employer had been negligent. By the doctrine of assumption of risk the workman was presumed, in entering upon employment, to have taken upon himself the risks usually incident to the

employment, including the chance of imperfections in the machinery, of which he might by some care have known. By the fellow-servant doctrine the employer was freed from responsibility for accidents due to the negligence of other employees, "fellow servants," even when it was impossible for him to know their character and reputation as in the case of a large factory or of a great railroad.

§ 6. **Development of compensation for accidents.** In some countries of continental Europe, notably Germany and France, the law of employers' liability was altered in favor of the worker early in the nineteenth century, so as to make compensation more usual and adequate. Since 1885, especially, this liability has been much further extended in many countries and in various directions, and yet the laws of accident compensation still retain many features of the old liability laws and remain in their legal character somewhat apart from the other branches of social insurance. Even in the newer type of "compensation" laws the indemnity paid by employers on account of accident is looked upon as commuted damages, but the old employers' defenses, just named, are abolished or made more difficult to plead. The new plan has the advantages of granting compensation by a schedule fixed in the law, insuring greater certainty, more adequate payments, greater ease of securing redress, and abolishing the cost of law suits. Still, in most countries and in most states in America, the worker has the option of suing under the old law. In some forty countries the principle of compensation by a prearranged schedule of rates has to some degree replaced that of litigation, and determination by a jury of the damages, in each separate case. The insurance spoken of in relation to accidents is technically that which the employers may or must take to protect themselves against loss, not that which the workman has.

The situation as to compensation in a few leading countries is as follows, the dates given being those of important legislation.

ACCIDENT INSURANCE

Voluntary (as to employers insuring, but compulsory compensation).

Great Britain, 1897, 1906, 1907.
France, 1898, 1907, (compulsory for seamen, 1898, 1905).
Denmark, 1898, 1908.
Belgium, 1903, (voluntary except for miners).

Compulsory insurance of their risks, by employers.

Belgium, for miners, 1868.
Germany, 1884, (in employers' associations), 1887, 1900, 1911 (voluntary for some classes).
Austria, 1887 (as in Germany), 1894 (voluntary for some classes).
Norway, 1894 (in a state central insurance office), 1896.
Italy, 1898, 1904.
Holland, 1901 (in the Royal Bank or in private companies).
Sweden, 1901 (as in Norway).

§ 7. **The compensation plan in America.** Under the practical operation of the law of employers' liability in force in any American state until 1911, a very small proportion of the workers injured while at work were legally entitled to any indemnity, and a still smaller proportion could succeed in recovering any substantial amount. Employers, and the accident companies with which employers insured, either compromised the claims for small amounts or fought bitterly in the courts the claims of those who refused to compromise. When the courts awarded damages, large or small, a large part of the proceeds went for legal expenses. But a small proportion of the total costs to employers came as benefits to the victims of accidents. It appeared in an extensive investigation of the business of the large industrial insurance companies that but 28 per cent of the premiums paid by employers were paid to workmen as indemnity.

Between 1911 and 1916 the laws have been changed to some extent in their application to selected occupations in at least 34 states and territories of the United States, and covering nearly all but some of the distinctly agricultural states. This remarkable development has been largely actuated and guided by a comparatively small group of socially minded nonworking class citizens rather than by either employees or organized workers. It is an encouraging example of what can be done by skilful methods, when conditions are ripe, in furthering righteous social legislation without the use of money or of corrupting influences.

§ 8. **Standards for a compensation law.** The standards which, in detail, in one jurisdiction or another, have already been attained, and which are the provisional ideals now sought by reformers, may be briefly stated as follows.[2] All employments should be included, altho, as yet, there are various exceptions, such as farm labor and domestic service, employers with but few employees (the number excepted being one to five), and nonhazardous employments. Compensation should be granted for all injuries, suffered in the course of employment, that cause disability beyond a definite waiting period of three to seven days. Compensation should include medical attendance for a limited period, and two-thirds of the estimated loss of wages for disability, either total or partial, during its continuance; and, in case of death, funeral expenses, and from one to two-thirds of the estimated wages, to the widow (or dependent widower) and children, or to other dependent relatives. To secure the full benefit of the plan it must be made the exclusive remedy, replacing entirely the old remedy of suits for negligence. The employer should be required to insure his risk, and general sentiment is moving rapidly toward the plan of a state insurance bureau as the exclusive agency.[3] For the administration of the system an

[2] The American Association for Labor Legislation has issued a pamphlet describing these features more in detail.

[3] Thirteen states had, in 1916, state insurance funds, and, in five states

accident and insurance board should be created in each jurisdiction. Experience shows the importance of careful attention to numerous other details, and many amendments will be made as the needs become manifest in practice.

§ 9. **Historical roots of sick-insurance.** Sick-insurance had its origin partly in trade unions and in fraternal societies voluntarily organized by workers, and partly in the system of public poor relief. The voluntary societies were first recognized, regulated, and encouraged by law (in some cases being given state subsidies), and later, in some cases, being made compulsory for some classes of members (i.e., such as miners and seamen). On these institutions have been built the later state systems of social sick-insurance. This movement had made large headway by the end of the third quarter of the nineteenth century in various European countries. The two systems that are the most typical and influential examples are those of the German Empire and of Great Britain, the former local and the latter national in organization. The British plan of national health insurance promises to be on the whole of the greatest influence upon American opinion and policy. However, the best informed American students favor in some features the more decentralized German rather than the centralized British system. While it is impossible to describe the various systems in detail, the situation in the leading industrial countries of Europe may be indicated as follows.

SICK-INSURANCE

Voluntary.

France, 1850, 1898 (voluntary except for miners).
Belgium, 1851, 1894.
Italy, 1886.
Sweden, 1891.
Denmark, 1892.
Holland (authorized private societies and poor relief).

(Oregon, Nevada, Washington, West Virginia, and Wyoming), they are the only insurance agencies allowed.

Compulsory.

Germany, 1883, 1911 (voluntary for others with earnings of $500).
Austria, 1888 (voluntary for some classes).
France, for miners, 1894.
Norway, 1909.
Great Britain, national system 1911 (was voluntary 1875–1911).

§ 10. **Need of sick-insurance in America.** Contrary to the usual opinion in America, the sick-insurance in Germany is, both in amount of contributions collected and in importance to the welfare of the workers and their families, of more importance than is either accident compensation or the system of invalidity pensions. Yet, thus far, our interest and efforts in America have been directed almost entirely toward the reform of accident compensation and almost everything remains to be done in the matter of social insurance against sickness. It is true that in recent years there has been a rapid development, in some of the larger cities, of medical insurance clubs conducted by private companies, with dues of ten cents weekly. They give medical care in ordinary cases, but require extra payments for surgical treatment and for medical supplies. They as yet touch only the outer fringe of the problem, but they testify to the need and to the increasing desire of the wage-workers for insurance of this kind. It is believed that at least 4 per cent of the income of wage-workers now is expended for the care of sickness and for burial insurance. The losses of wages meantime remain unequalized by insurance indemnities. A large proportion of the cases of temporary destitution in ordinarily self-supporting families is due to sickness. The German experience shows that 4 per cent of wages, collected in part from employers and in part from wage-workers, is sufficient to give a far better medical service than can be had through private effort, to give some indemnity for loss of wages, and to

carry on a very useful hygienic work for the families and for the public health.

§ 11. **Old-age and invalidity pensions.** Insurance to provide pensions for old-age and permanent (partial or total) disability is in nature but an extension of the insurance against accident and sickness. In a relatively small number of cases accidents result in permanent disability and it is both illogical and inhumane to limit, arbitrarily, the compensation in such cases to a certain period, as two or three years, as is done in many compensation laws. The disability due to advancing years is in nature a chronic illness, inevitable, sooner or later, to all who survive. The movement to provide some indemnity in such cases has been rapid in European countries, doubtless because the problem was a very pressing one where the average earnings are low. In Germany and Austria this development has been more in connection with other forms of insurance; in Denmark, Great Britain, and France it has had more the aspect of an extension of poor relief. In the United States little has been done to provide for these great needs. Massachusetts in 1907 authorized savings banks to sell insurance and old-age pensions to those who applied. An increasing number of corporations, especially railroads, are adopting a pension system for men growing old in their service, but nothing has been done of a general public nature toward compulsory and universal protection against these misfortunes.

The following table shows the situation in some of the leading countries:

OLD AGE AND INVALIDITY PENSIONS

Voluntary.

Belgium, 1850, 1903 (voluntary except for miners).
Italy, 1898, 1907 (all wage earners).

Compulsory.

Belgium, for miners, 1868.
Germany, 1889, 1899, 1911.

Austria, 1889 (miners only); 1906 (office employees).
Denmark, 1891, 1908 (noncontributory).
France, for seamen 1850, 1881; for miners, 1894, 1905, 1907 (noncontributory, all indigent citizens); 1910 (contributory, all workmen and employees; was voluntary by laws 1850, 1886).
Great Britain, 1908 (noncontributory, old age pensions, granted by the government).
Sweden, 1913 (universal, contributory).

§ 12. **Unemployment insurance.** The most difficult of all the problems of insurance is that of unemployment. There the amount of the risk in any case is so largely dependent on the personal qualities of the worker. There are obvious objections to making the competent, steady, sober members of any trade bear the burden of the infirmities of their fellows. But, on the other hand, as we have seen,[4] a large part of the problem of unemployment is chargeable to social maladjustments rather than to individual faults.

At present development in this field is along two lines, that of subsidized trade-union relief (the Ghent system), and that of compulsory state insurance in certain industries. The former has been adopted by many cities and by some countries in western Europe, the public paying a certain proportion (from one sixth to one third) of the amounts of the benefits paid by the unions. Great Britain is the only country as yet to adopt a compulsory state system. It began operation in 1912, and applied to 2,500,000 persons, or one sixth of all the wage-earners. The contributions are made $\frac{3}{8}$ by employers, $\frac{3}{8}$ by wage-earners, and $\frac{2}{8}$ by the state. There are several original and interesting features of the act, such as rewarding, by the refunding of dues, those employers that provide regular employment and older workmen that have received benefits amounting to less than their contributions. Its administration in close connection with the labor ex-

[4] Ch. 22, secs. 14–18.

changes will give valuable experience in this field. The working out of the many minor problems of classification, assessment, and administration, of unemployment insurance, will require many more years of experimentation.

§ 13. **Need of ideals in social insurance.** The world has had nearly forty years of experimentation of a remarkably varied kind, in the field of social insurance, since the German system was inaugurated in the eighties of the nineteenth century. America stands almost at the beginning of a development along those lines that is certain to be of enormous extent and importance. It would be folly for us to repeat the costly errors of other countries by failing to recognize certain principles which have been clearly established by experience. If these could be grasped and firmly kept in mind our progress in this field in America would be faster, more certain, less costly, and farther reaching than it promises otherwise to be. We can here attempt no more than merely to outline these principles that must be embodied in an ideal system of social insurance in America.

§ 14. **Insurance rather than penalty.** The principle of social insurance rather than that of legal penalty should be universally recognized. At present, in all countries where the several kinds of insurance are found side by side, accidents are indemnified on plans that are still rooted in the notion of employers' liability for negligence; whereas, necessarily, the indemnity in case of sickness and of old age has no such explanation. The unfortunate result of this difference of view is that whereas all cases of sickness and invalidity entitle to benefits, only those accidents suffered "in the course of employment" are indemnified, and the worker is left unprotected in a large share of the accidents to which he is liable. The worker's need and the social need are thus not adequately met. We have started along the same line of development in America, and it is to be feared that only through a long series of legal fictions and contradictory judicial decisions shall we be able to work out toward consistency in this mat-

ter. Another unfortunate result of this difference is that accident compensation, being made peculiarly the task of the employers, does not develop the spirit of responsibility on the part of the workers and of coöperation between them and employers that other forms of insurance call forth, where representatives of both parties sit together in the administration of the system.

§ 15. **The compulsory principle.** Insurance must be general in its application to all the persons within broad wage-earning classes, and in order to be general it must necessarily be compulsory, not voluntary, in its application. To leave any form of insurance optional, or elective, with either employers or wage-workers, is to fail of the main purpose in a large proportion of the individual cases where it is most needed, and to increase the expense to those that are included. Within a compulsory system, however, there should be given wide opportunity for the voluntary principle by admitting to the system others that are not compelled to insure, and to enable any insured person to increase his paid-up, nonforfeitable insurance at any time by extra payments made at times of unusually high wages, from legacies, or from any other exceptional income.

§ 16. **State insurance and a unified system.** The state, through the public insurance office, must ultimately be the sole agency for insurance. Only in this way can the maximum of simplicity and economy be attained. Of course, this calls for a better appreciation of expert training, and a broader sentiment in favor of the merit system in the public service than we yet have in America.

There should be a unification of various kinds of insurance in one general plan and under one general administration for the whole state. This should be done with full regard to the actuarial differences in costs as among various kinds of insurance, various trades, various establishments, and, to some extent, even the various individuals, so as to ascertain the costs and to distribute them equitably.

Only in this way can provision be made for entire mobility of labor, so that men may not be bound, as a condition for obtaining benefits, to continue in the service of any one employer. To this end there should be interstate comity and coöperation, so that the insured could at any time transfer his actuarial equity from one state to another.

§ 17. **The contributory principle.** The contributory principle should be adopted, and both employers and wage-earners contribute to the cost in equal amounts. But further, the general public interests may be recognized through the payments in aid of the funds (subsidies, subventions). Both employers and employees usually seek to escape the burden, by getting the state to bear the whole expense [5] or by getting the other party to pay all or the larger part. But it is much to be desired that in large part the finances of a system of social insurance should be disassociated from the ordinary budgetary system of taxation and public expenditures. The fundamental reason why the premiums should be divided between employers and employees is that this is most favorable to the equal participation and coöperative efforts toward reducing the risk, and developing right industrial and political relations. Everywhere it is the practice to provide for representation nearly in proportion to contributions.

It is usually assumed by employers, by wage-workers, and by others in the discussion of the subject, that the burden remains and is borne by those who directly pay the premiums, and just in proportion to their payments. This is an almost utterly mistaken view. There is, on the contrary, every reason to believe that the general principles of shifting and incidence of taxation apply fully here.[6] It cannot be doubted that, if wages are not arbitrarily fixed, if they result, as we must believe, from an adjustment and equilibrium of the various classes of labor in a general economic situation, then after a time the premiums become a part of that

[5] See examples in the lists of laws above cited, sec. 11.

[6] See above, ch. 16, sec. 14.

general situation. Payments compulsorily made by employers (by all, without exception) will ultimately be offset by a lower wage, and if transferred to the workmen will ultimately be offset by a higher wage. Of course, there is some delay and friction in making the adjustment, but, under any settled policy, the adjustment once made will be maintained. The benefit of social insurance to the workingmen is not mainly that their wages are increased by the direct contributions of employers to the premiums, tho there are doubtless some cases of "parasitic" industries and parasitic employers that escape their due share of payments for risk, now that there is no insurance system. The great benefits are that total wages and losses are apportioned economically to the points of maximum utility; that accumulation of capital by and for the wage-workers is made regular, automatic, safe, and in great amounts; and that financial aid, physical care, and mental relief from some of the most tragic anxieties of life, are given effectively and economically to the masses of the people.

But, as has been indicated in another connection above, it is far from being a matter of indifference, psychologically, where the first, immediate burden of premium payment falls. The persons paying the premiums, in whole or in part, are far more keenly aware of the cost, and alive to reducing and removing the evil conditions. Moreover, their interest is stimulated by the fact that they are the first to gain by any temporary economies, and the more so because of the illusory belief sure to persist, that they are the ultimate as well as the immediate bearers of the costs.

The development of a complete system of social insurance along these lines promises to do more than any other single measure of practical social reform now under consideration to change the conditions and the outlook of the wage-earning class.

CHAPTER 24

POPULATION AND IMMIGRATION

§ 1. Nature of the population problem. § 2. Complexity of race problems. § 3. Economic aspects of the negro problem. § 4. Favorable economic aspects of early immigration. § 5. Employers' gains from immigration. § 6. Pressure of immigration upon native wage-workers. § 7. Abnormal labor conditions resulting from immigration. § 8. Popular theory of immigrant competition. § 9. Divergent views of effects on population. § 10. The displacement theory; its fundamental assumption. § 11. Magnitude of the inflow of immigrants. § 12. Earlier and recent effects of immigration upon wages. § 13. *Laissez-faire* policy of immigration. § 14. Social-protective policy of immigration. § 15. Population and militarism. § 16. Problem of maximum military power.

§ 1. **Nature of the population problem.** No one of the problems of labor thus far discussed is of so great importance in relation to popular welfare as is "the problem of population." By this is meant the problem of determining and maintaining the best relation between the population and the area and resources of the land. What is to be deemed "best" in this case depends, of course, on the various human sympathies and points of view of those pronouncing judgment. Very generally, until the nineteenth century, the only view that found expression was that of a small ruling class which favored all increase in population as magnifying the political power of the rulers and as increasing the wealth of the landed aristocracy. This view still is unconsciously taken by the members of a small but influential class, and is echoed without independent thought by many other persons. But more and more, in this and other labor problems, another more democratic standard of judgment has come to be taken, that

of the abiding welfare of the masses of the people. This is the point of view that must be taken by the political economist in a free republic.

The problem of population presents two main aspects: one as to composition, and the other as to numbers of the people. Changes in either of these respects concern the welfare of the masses. Changes in the kinds of people, or in their relative numbers, may greatly affect the welfare of the people, in some cases touching special large classes, and in others affecting the whole mass of the people.

§ 2. **Complexity of race problems.** The questions of race composition that we shall here consider are those of the negro and of the immigrant.[1] Both of these questions are complex and go beyond the limits of mere economic considerations, touching the most vital political and social interests of the nation. Indeed they involve the very soul and existence of peoples, for who can doubt that ultimately racial survival and success are mainly to be determined by physical and spiritual capacity?

The negro in America is the gravest of our population problems. In large portions of our land it overshadows every other public question. Yet the negro is here because men of the seventeenth century ignored the complexity of the labor problem and thought only of its economic aspect. The landowners wished cheaper labor and, reckless of other consequences, they imported slaves from Africa to get it. They gained for themselves and a few generations of their descendants a measure of comparative ease, but at a frightful cost to our national life—a cost of which the Civil War now seems to have been merely a first installment on account rather than a final payment.

[1] Even more important than these is the relative decrease of the successful strains of the population, briefly treated in Vol. I, ch. 33. This is the problem of eugenics, the choice and biologic breeding of capable men to be the citizens of the nation, and broadly understood, it includes both the negro and the immigrant problems.

§ 3. **Economic aspects of the negro problem.** The negro as a wage earner is found very little outside of the least skilled branches of a limited range of occupations. Of these the principal ones, as is a matter of common knowledge, are farm work, domestic service (including janitor service in stores and factories and work in hotels), and crude manual outdoor labor. Repeated attempts to operate factories with a labor force of negroes have proved unsuccessful. In some of the better-paying occupations in which large numbers of negroes were found in the North soon after the Civil War, such as barbering, waiting on table in the best hotels, and skilled manual work, they have been largely displaced by European immigrants. Negroes are a disturbing and unwelcome influence in labor organizations, and even when nominally eligible to membership are in fact rarely accepted. They very frequently are employed as strike-breakers and this fosters race antagonism both immediately and permanently.

The negro problem is, from our present outlook, insoluble. The most laudable of present efforts, that for industrial training, represented by Hampton and Tuskegee Institutes, and the work of Booker T. Washington, leaves the dire fact of two races side by side and yet unassimilated socially, politically, and, in large measure, economically. Two other possibilities, race admixture and caste, are both so repellent to white American thought, that they cannot be looked upon as solutions. Segregation in a separate state, or separate states, is a thorogoing proposal, but is practically impossible. Finally there is the conceivable, but improbable, event of the decrease and extinction of the negroes in America. Their relative number has declined since 1800,[2] but their absolute number still continues to increase. It seems probable that if European immigration were to be stopped that a very large

[2] See Vol. I, p. 430, figure 58, showing the fall in the decennial rate of increase of negroes compared with whites; and see comment in accompanying note.

migration of negroes from the South to the North and the West would occur to take places hitherto filled by unskilled immigrant workers. In the year 1915, following the check to immigration as a result of the European war, a very marked movement of this kind set in. If this occurred on a much larger scale it might result in greatly reducing the negro population in some portions of the South, and as the "natural rate of increase" of the negroes in the North is a negative quantity, it might cause the total negro population of the country to begin absolutely decreasing.

§ 4. **Favorable economic aspects of earlier immigration.** Regarding the immigration problem we are not confined to futile expressions of regret as in the last case. For by the "immigration problem" is meant primarily and mainly the coming of immigrants, and we can by legislation limit or stop their coming, if we will. The question at issue is whether their coming really is an evil or, on the whole, a blessing to the country.

The historic American attitude toward immigration has been highly favorable to it. The early settlers on these coasts were led by various motives, some political, some religious, but far the largest part economic,—the motive of bettering their worldly condition. Land was plentiful and all men of any capacity could easily become landowners. An inflow of laborers was favorable to the interests of all the influential elements of the population, especially to landowners and active business men. Increase of numbers, favoring division of labor and the economies of production in manufacturing, and reducing the dangers from Indians and from foreign enemies, seemed an unmixed blessing. Many of the newcomers soon became landowners and employers, and in turn favored a continuance of the movement. Thus was hastened the peopling of the wilderness. The interest of these classes harmonized to a certain point with the public interest; but likewise it was in some respects in conflict with the abiding welfare of the whole nation. It led to the fateful introduc-

tion of slavery from Africa, and it encouraged much defective immigration from Europe, the heritage of which survives in many defective and vicious strains of humanity, some of them notorious, such as the Jukes, the Kallikak family, and the Tribe of Ishmael.

§ 5. **Employers' gains from immigration.** The immigration from Europe has furnished an ever-changing group of workers, moderating the rate of wages which employers otherwise would have had to pay. The continual influx of cheap labor aided in imparting values to all industrial opportunities. A large part of these gains have been in trade, in manufactures, and in real estate as the cities have taken and retained an ever-growing share of the immigrants. Successive waves of immigration, composed of different races, have ever been ready to fill the ranks of the unskilled workers at wages somewhat lower than the current American rate.

The lower enterprisers' costs that resulted from immigration surely did not accrue to the advantage of the employers alone. Bearing in mind the fact that the employing-enterpriser is a middleman,[3] we may see that the lower costs must, in most cases, be passed on to the consumers in the form of lower prices of products. And often the consumer, as the employer of domestic service at lower rates than otherwise would be possible, gets this advantage directly. This increases the number of those whose self-interest, at least when narrowly judged, leads them to favor the policy of unrestricted immigration. Tho perhaps less general than it once was, this sentiment in favor of immigration is still potent. The continuous inflow of immigrants has in many industries come to be looked upon as an indispensable part of the labor supply. Conditions of trade, methods of manufacturing, prices, profits, and the capital value of the enterprises have become adjusted to the fact. Hence results one of those illusions cherished by men whenever they identify their own profits with the public welfare. Without immigration, it is

[3] See above, ch. 20, sec. 11, and references in note.

said, "the supply of labor would not be equal to the demand." It would not at the wages prevailing. But supply and demand have reference to a certain price. At a higher wage the amount of labor offered and the amount demanded would come to an equality. This would temporarily curtail profits, and other prices would, after readjustment, be in a different ratio to wages.

§ 6. **Pressure of immigration upon native wage-workers.** There must always have been cases where the labor-incomes of workers were somewhat depressed by the incoming of immigrants. Indeed, that must to some extent always be so when the natives continue to work alongside of the immigrant at just the same job. But before the Civil War living conditions were simple, wages comparatively high and (more important) pretty steadily rising, and the wage-earning class not yet a large share of the population. Moreover, this conflict of interest was minimized and often quite avoided by the native changing to another occupation. In the old days there was always the outlet of free land on the frontier, now closed. Always there has been a better opportunity for natives to move into higher positions of foremanship or as employers of immigrant labor.

As the wage-earners have become relatively more numerous, many of them have felt more keenly the pressure of competition from immigrant labor. Moreover, the immigra-

Decade	*Immigration in the period*	*Increase of population*	*Immigration, per cent of population-increase*
1820–30	124,000	3,300,000	3.8
1830–40	528,000	4,200,000	12.3
1840–50	1,604,000	6,100,000	26.3
1850–60	2,648,000	8,200,000	32.3
1860–70	2,369,000	8,400,000	28.2
1870–80	2,812,000	10,400,000	27.0
1880–90	5,246,000	12,700,000	41.3
1890–1900	3,687,000	13,100,000	28.1
1900–1910	8,795,000	16,000,000	55.0
Total, 90 yrs.	27,800,000	82,400,000	33.7

tion since 1890 has been increasingly from southern and southeastern Europe, from countries with much lower standards of living, and has been of enormous proportions. Here are some significant figures as to immigration since 1820.

§ 7. **Abnormal labor conditions resulting from immigration.** The labor supply coming from countries of denser population and with low standards of living creates, in some occupations, an abnormally low level of wages and prices. Children cannot be born in American homes and raised on the American standard of living cheaply enough to maintain at such low wages a continuous supply of laborers. Many industries and branches of industry in America are thus parasitical. A condition essentially pathological has come to be looked upon as normal. The commercial ideal imposes itself upon the minds of men in other circles.

Statistics show that the prevailing wages for unskilled manual workers in America have risen much less since the Civil War than have other wages.[4] Wages in the great lower stratum of the unskilled and slightly skilled workers are much lower in America relative to those of more skilled and professional workers than they are in Europe. It can hardly be doubted that the most important, tho not the sole, cause of this situation has been the unceasing inflow of immigrants going into these low-paid occupations. The "general economic situation" in America, but for immigration, would compel higher wages to be paid to the masses of the workers. If immigration were suddenly stopped in a period of normal or of increasing business, wages in these occupations would at once rise, and that, without the aid of organization, of strikes, or of arbitration. This would affect most those occupations which now present the most serious social problems, in mines, factories, and city sweatshops. In some small measure the war in the Balkan States, by recalling many men for service, had this influence in 1912; and the great war beginning in 1914, by stopping a large part of the usual im-

[4] See below, sec. 12.

migration, gave a striking demonstration of this principle. In employing circles the rise of wages was sometimes referred to with an air of grievance as due to the "monopoly of labor," as if the economic situation here, enabling the wage-earners (millions of them immigrants), to get a higher competitive wage when immigration temporarily was diminished, constituted a monopoly.

§ 8. **Popular theory of immigrant competition.** The depressing effect of the ever-present and ever-renewing supply of immigrant labor upon wages appears most clearly at the time of wage contests, and often seems to be the most important aspect of the question. Laws against contract labor, passed to prevent this particular evil, have put no check to the great stream of those guided by friends to a "job." Organized labor thinks most of these immediate effects. Commonly labor's protest is expressed in terms of the untenable "lump of labor" theory of wages. "Every foreign workman who comes to America" is believed to take "the place of some American workman." The error in this too rigid conception of the influence exerted upon wages by new supplies of labor is evident in the light of the principles of wages. Yet it may be true that, both immediately and ultimately, the foreign workman depresses the incomes of those already here with whom he directly competes. On the other hand, those in occupations into which few immigrants enter may, as consumers of cheaper products, be immediately the gainers in real wages, by the very change that depresses the wages in the lower strata.[5] The manufacturing-employers advocate "protection" which enhances the price of their products, while usually favoring "free trade" in immigration to cheapen their costs. What more natural than that laborers should favor a policy of protection to labor, to keep foreigners from coming here to be their competitors.

§ 9. **Divergent views of effects on population.** The foregoing views of the effects of immigration upon wages, both

[5] See Vol. I, p. 221, on non-competing classes.

of those favoring and those opposing it, are short-time views, relating to immediate rather than ultimate effects. If the immediate causes are continuously repeated throughout the lives of successive generations the results are for those mortal men as ultimate as anything that concerns them. In this case it would make no difference to the millions of workers, whose wages are depressed, if it could be shown that wages fifty or a hundred years from now would be no lower as a result of continued immigration than they otherwise would be; or to the employer that wages would then be no higher. But to the social philosopher and to the statesman, interested in the abiding general welfare, the ultimate economic effects are of the greatest importance.

The question is: What will be the far-reaching, long-time effects of immigration upon the general economic situation, as that determines the welfare of the mass of the people? We confine ourselves here to the economic effects, leaving aside as far as possible the racial, moral, religious, political, and general social aspects of the subject.

We are met at the outset by two divergent opinions as to the permanent results of immigration upon the growth of population. The one is that all immigrants coming to our shores are net additions, hastening by so much the growth in density of population; the other opinion, the displacement theory, is that immigration has the effect of checking the natural increase of the native stock so much that it does not materially change the total population, or actually causes it to be less than it would have been had no immigration occurred.

§ 10. **The displacement theory; its fundamental assumption.** The latter opinion which still has many upholders [6] was first advanced by a distinguished economist, Francis A.

[6] The latest and best statement is that of H. P. Fairchild, "Immigration," pp. 215–225, citing various opinions, and accepting the view of Walker. But he says (p. 216): "It must be admitted that this is not a proposition which can be demonstrated in an absolutely mathematical way, which will leave no further ground for argument."

Walker, but his first statement of it referred only to the period between 1830 and 1860. The main argument in support of this opinion was that in the three decades from 1830 to 1860 during which a large immigration occurred, the decennial rates of increase of the population were almost the same as in the three decades from 1800 to 1830.[7] The conclusion drawn from these figures is that the immigrants were the cause of the decline of the average birthrate that occurred in the families of native stock. The validity of this conclusion is absolutely dependent on the assumption that no other forces were at work to produce this result. Must we believe that, but for immigration, the native birthrate would not have declined at all? This is incredible. The birthrate of the native stock had already begun to decline before 1820 as is shown by many family records, and by the fall of the decennial rate of increase from 35 and 36 in the decades ending 1800 and 1810, to 33.1 and 33.5 in the next two decades. This occurred despite the enormous western settlement then under way on the Louisiana Purchase. The decline of the birthrate began at that time to appear as a world-wide phenomenon, accompanying improved transportation (roads, steamboats, steam railways), the rapid growth of cities, and the general industrial revolution. The general birthrate has declined of recent years in Australia and New Zealand, where there has been little immigration, more rapidly than it has in the United States.[8]

§ 11. **Magnitude of the inflow of immigrants.** In view of these facts it seems necessary to modify the displacement theory greatly. To the extent that the coming of immigrants caused a net addition to the population, it doubtless hastened the growth of cities and the development of industrialism,

[7] See Vol. I, p. 429, for figures of population and of decennial rates of increase.

[8] The effect of the growth of cities is discussed in the "American Journal of Sociology," Vol. 18, p. 342, in an article on "Walker's Theory of Immigration," by E. A. Goldenweiser.

and thus helped to reduce the birthrate in some classes. But this view admits the effect upon population which the displacement theory denies. Probably, in a good many cases the more rapid business advancement of the natives, because of the coming of the immigrants, led to the decline of birthrate that is a consequence of economic success.[9] But a large part of this change would have inevitably occurred even if there had been no immigration after 1820. Between 1820 and 1910 the population increased 82,400,000, and the total number of immigrants was 27,800,000, or 33.7 per cent of the total increase. In an urban environment the birthrate among immigrants always has been very much higher than that of native Americans. This fact alone might well be taken as sufficient to offset whatever depressing effects the coming of the immigrants may have had upon the native birthrate, leaving the immigration nearly a net addition to population. It does not seem possible to believe that if there had been no immigration, our native population, rapidly advancing in average wealth, wages, and general education, would have continued with an unchecked birthrate, and would have filled all the places taken by immigrants. And no believer in the displacement theory has ever ventured to claim, as the argument requires, that if immigration were now stopped, the birthrate would again return to the old standard of 1820, or would cease to decrease somewhat. Especially of late, since the rate of increase of the native population has become much less, is the effect of continuing immigration apparent. In the decade of 1900–1910 the total population increased 16,000,000, while nearly 9,000,000 immigrants arrived. Of the remaining increase, 3,000,000 consisted of children born of foreign parents. That leaves three or at the most four million (4,000,000) increase attributable to the native stock, white and negro combined.

§ 12. **Earlier and recent effects of immigration upon wages.** Let us now correlate the principle of decreasing re-

[9] See Vol. I, p. 420.

turns and the facts as to the exploitation of our natural resources [10] with the growth of our population, on the assumption that immigration has been a net contribution to our numbers. While the vast frontier was open to settlement, the growth of population could not fail to be looked upon as a blessing, even tho somewhat mixed with political evils, immorality, and pauperism. Beginning in colonial times, the policy of "the open door" to immigrants came thus to be deemed the traditional, patriotic American policy. Yet there is grave reason to believe that the rate of growth in the nineteenth century was wastefully rapid and that a slower and sounder growth might have been better.[11] However, this rapid growth was largely extensive, spreading over wider areas, and was consistent with a pretty steady rise of real wages in America until about 1895,[12] the level continuing higher than that of Europe despite the contemporaneous rise of wages there. Much of this general rise is undoubtedly attributable to the adoption of better tools, machinery, and industrial processes, the more so as inventions and new methods have rapidly become free goods.[13] The beneficial improvements long coöperated with the rapid exploitation of rich resources to raise real wages, and then undoubtedly continued to offset for a time the unfavorable effects as the richer resources began to show signs of exhaustion. Since the end of the last century, however, the net trend upward seems to be checked, and "the rising cost of living" (real cost) has come to be a serious actuality for larger sections of the population.[14]

Yet so long as wages are enough higher in America to pay

[10] See Vol. I, chs. 34 and 35.

[11] E.g., see above ch. 14, sec. 11 on the prodigal land policy.

[12] See Vol. I, p. 436 ff.

[13] See Vol. I, ch. 36, on machinery and wages.

[14] For analysis of the available statistics bearing on the subject, with conclusions that real wages are no longer rising, see H. P. Fairchild, in "American Economic Review" (March, 1916), "The standard of living—up or down?"

the passage of the low-paid workers of the industrially backward nations, they will continue to come. The ease and cheapness of migration in these days of steamships, the encouragement of immigration by the agencies and advertisements of the steamship lines, and the increasing readiness of the peasantry to migrate, have become well known through recent discussions. Unless immigration is limited, it must continue to depress the wages of American workingmen, through both its immediate and its ultimate effects.

§ 13. **Laissez-faire policy of immigration.** There are those who take a fatalistic, or a *laissez-faire,* view of the subject, and declare that the problem will solve itself as the level of American wages comes to be nearly the same as that of the countries of Europe from which our immigration is coming. True enough, if this can be called a "solution." There are many who cherish the commercial ideal according to which cheap labor is absolutely desirable and needful to produce cheaper products. This ideal has spread to wider circles. Here, for example, are the words of a man who combines wide knowledge of the facts of immigration with keen sympathy for the working classes:[15] "The past industrial development of America points unerringly to Europe as the source whence our unskilled labor supply is to be drawn. . . . America is in the race for the markets of the world; its call for workers will not cease." Yet a little further on he must say: "All wage-earners in America agree that it is not as easy to make a living to-day as it was twenty years ago, and the dollar does not go so far now as it did then. The conflict for subsistence on the part of the wage-earner is growing more stern as we increase in numbers and industrial life becomes more complicated, and the fact must be faced that the vast army of workers must live more economically if peace and well-being are to prevail."

§ 14. **Social-protective policy of immigration.** A differ-

[15] Peter Roberts, in "The New Immigration," 1912, preface, p. viii, and p. 47.

ent kind of solution is offered by those who favor the strict limitation, if not the complete prohibition, of immigration. The foregoing study indicates that the time has come, if it is not far past, when the traditional policy of fostering immigration is opposed to the welfare of the masses of the people. This belief can be based solely on grounds of numbers, the relation of population to resources, quite apart from a preference for particular races or the familiar arguments regarding social and political evils and lack of assimilation, however valid they may be. The limitation of immigration would immediately improve working-class conditions where they are worst in America,[16] and would check and probably reverse the tendency to diminishing returns already manifest in many directions. This opinion does not necessitate an absolute prohibition of immigration; it is consistent with the continuance of immigration of a strictly selected character, and in numbers so small that all European immigrants now here could be rapidly and completely assimilated, economically and racially. With a slow national increase of population and with the continued progress of science and the arts, it should be possible for real wages to continue indefinitely rising in America. The selection of immigrants to be admitted should be a part of a national policy of eugenics,[17] which aims to improve the racial quality of the nation by checking the multiplication of the strains defective in respect to mentality, nervous organization, and physical health, and by encouraging the more capable elements of the population to contribute in due proportion to the maintenance of a healthy, moral, and efficient population. In such a view, a eugenic opportunity is presented in the selection and admission of immigrants that are distinctly above (not merely equal to) the average of our general population.

§ 15. **Population and militarism.** In view of the recrudescence of the spirit of armed national aggression evident

[16] See above, sec. 7; also ch. 21, sec. 9.

[17] See above, sec. 2, note; also Vol. I, p. 422.

of late, and especially in the outbreak of the Great War in 1914, the military aspect of the population question deserves serious consideration. The growth of savage and barbarian tribes in numbers, so that their customary standards of living were threatened, frequently has led to the invasion and conquest of their richer neighbors.[18] To-day nations on a higher plane of living are probably repeating history. The nation with an expanding population is tempted to seek an outlet for its numbers and for its products by entering upon a policy of commercial expansion, which in turn has to be supported by stronger military and naval establishments. It is led by primitive impulses that to it carry their own moral justification, to possess the territory of its neighbors. The immediate occasion is probably some matter of internal politics, such as growing discontent and democratic sentiment among the people. Nations with slowly growing populations, and still possessed of ample territories to maintain their accustomed standards of life, naturally favor the *status quo,* and are pacifist or nonmilitarist. If they arm it is for their own safety. In this view, militarism is seen to consist not in having drilled soldiers and stores of munitions, but in the national state of mind that would use these for aggression, not merely for defense. When, therefore, a powerful nation has reached a certain stage in the relation of its population to resources, limitation of population not limitation of armaments is the real pacifism; and increase of population, not increased military training or a larger navy, is the real militarism.

§ 16. **Problem of maximum military power.** It is a grave question, however, whether a nation with a comparatively sparse population, high wages, and great wealth can safely limit that population in the presence of a capable, ambitious, and efficient rival that covets such opportunities. On the one hand, a population may be so sparse that it has not soldiers enough to defend its territory against a numerous

[18] See Vol. I, p. 412, on war and the pressure of population.

enemy; on the other hand, it may be so dense, and consequently average incomes be so low, that it cannot properly train, arm, and support its population of military age. The recent developments in the art of warfare call for great use of the mechanical industries, for great power to endure taxation, and for great financial resources, conditions found only where the average of national income is high. The point of maximum military power must be far short of the maximum possible population. It would seem that a nation of 100,000,000 inhabitants favorably situated to resist aggression, well supplied with the natural materials for munitions, and well equipped to produce them, might safely limit its numbers so as to ensure a high level of popular income. This safety would be greatly increased by permanent alliance with other peoples likewise limiting their numbers and, therefore, interested in maintaining the peace of the world. In this way it would be possible for them all to maintain a standard of popular well-being even higher than is fully consistent with the maximum military power, even in the presence of prolific and aggressive rival nations.

PART VI

PROBLEMS OF INDUSTRIAL ORGANIZATION

CHAPTER 25

AGRICULTURAL AND RURAL POPULATION

§ 1. Agriculture and farms in the United States. § 2. Rural and agricultural. § 3. Lack of a social agricultural policy in America. § 4. Period of decaying agricultural prosperity. § 5. Sociological effects of agricultural decay. § 6. Fewer, relatively, occupied in agriculture; use of machinery. § 7. Transfer of work from farm to factory. § 8. The rural exodus. § 9. The farmer's income in monetary terms. § 10. Compensations of the farmer's life. § 11. Ownership and tenancy.

§ 1. **Agriculture and farms in the United States.** There were nearly 12,400,000 persons in the United States gainfully occupied in agriculture in 1910, this being 32.5 per cent of all in occupations. These, together with other family members not reported as engaged in gainful occupations, constitute the agricultural population, and comprize more than one third of the total population of the country. "Agriculture" is here used in a broad sense, including floriculture, animal husbandry (poultry, bee culture, stock raising), regular fishing and oystering, forestry and lumbering. Agriculture thus produces not only the food but (excepting minerals, including coal, stone, natural gas, and oil) the raw or partly finished materials for all the manufacturing and mechanical industries.

With the exception of areas devoted to forestry on a large scale and to fishing, the industry of agriculture is pursued on the 6,400,000 farms, covering 46 per cent of the total land area of the country. Of the land in farms, a little over half is classified as improved. The estimated value of farm property, including buildings, implements, machinery, and live stock, was, in 1910, about $41,000,000,000, somewhere near

one fourth of the estimated wealth of the country at that date.[1]

§ 2. **Rural and agricultural.** The adjectives rural and agricultural are often used loosely as synonyms. Agricultural refers primarily to the occupation of cultivating the soil, and is properly contrasted with other occupations, as mechanical and professional; whereas rural refers to place of residence outside of incorporated places of a specified minimum population (of late, 2500), and is properly contrasted with urban, applied to those living in larger population groupings. In 1910 the rural population comprised 53.7 per cent of the total population. It is true that the two groups of the agricultural and the rural populations are largely composed of the same persons, but to a considerable extent they are not. Many farm houses, together with part or all of the farm lands, lie inside urban boundaries, and, besides, some persons engaged in agriculture reside in urban places. On the other hand, any one acquainted in the least with a rural district (in the statistical sense) can at once think of many persons living there that are not engaged in agriculture; they may be merchants, warehousemen, railway employees, physicians, handicraftsmen, teachers, artists, retired business men, and others. The percentages given in this and in the preceding section indicate that about two fifths of the rural families are not engaged in agriculture.

It is often important to make this distinction, tho it is difficult to do; for some of the much-discussed rural questions are of a broad social nature, are matters of rural sociology, relating pretty generally to the rural population; while other questions of "rural economics" are more strictly matters of agricultural economics and relate to the farm as a unit of industry, or to agriculture as an occupation.

§ 3. **Lack of a social agricultural policy in America.** It is a common remark that the farmer lives an independent life. This develops in him a self-reliant spirit. He readily gives

[1] See above, ch. 1, secs. 7 and 8.

and takes simple neighborly help in informal ways, but he does not readily turn to government for aid. While every influential urban group, organized or unorganized—manufacturers, merchants, wage-earners—has sought and obtained special protective social legislation, the farmer has, from choice or necessity, usually had to work out his economic problems unaided. The exceptions are few and of small importance. For example, the prodigal land-policy of the state and national governments encouraging the settlement of the frontiers was not a farmers' policy. It was originally inspired by the larger political purpose of extending the bounds of the nation; later it was advocated and fostered by a land-speculating element, linked with bad politics, in the frontier states, and not by farmers as such. It in time greatly injured the farmers of the eastern states. The "Granger legislation," to regulate railroad rates, was so called by the East in a spirit of derision because it began in the distinctively agricultural states of the Northwest; but it had neither the aim, nor the result, of obtaining especially for farmers any rates that were not open to every one on the same terms. The tariff rates on American agricultural products, placed in the acts as a matter of form, have, with minute exceptions, been ineffective to favor farmers, as the shipments were all outward and none inward, while heavy and effective rates were placed on most things that the farmers had to buy.[2]

In part the explanation of the lack of legislation favoring farmers is to be found in their small part and influence, as a class, in political affairs, outside of minor executive offices in township and county governments. In the state legislatures farmers are few relative to their numbers in the community, and still fewer in either House in Washington. Among the real exceptions to the otherwise fair record of the farming class in this respect is the tax on oleomargarine and the special favor accorded to farmers' associations in the Clayton Act. It might be cynically said that the farmer has

[2] See ch. 14, sec. 5.

not been "sharp" enough to get his share of the "good things" that the business classes were passing around in protective legislation. But farmers have, as has every economic group, interests which may legitimately be the subject of social legislation; whereas they have limited their attention to their private affairs at home and have been prone to vote patiently and proudly the "straight ticket" to elect business men and lawyers to office.

§ 4. **Period of decaying agricultural prosperity.** Despite the facts just stated, every campaign orator admits that there is no other occupational class of the nation of greater importance to the nation than the farmers, or more deserving of prosperity. Every other part of the industrial organization of a nation is interrelated with its agriculture. Great changes, in respect to growth of population, immigration, exhaustion of natural resources, mechanical inventions, scientific discovery, and many things more, have been occurring, which have altered and, in some communities, have destroyed the very foundations of agricultural enterprise in America since the close of the Civil War in 1865. But the farmers have been left to struggle individually with their individual difficulties, tho the outcome was of the gravest portent to the whole social economy. Such was the case in the period of agricultural depression from 1873 to about 1896.[3] Multitudes of ancestral homesteads were then left behind by the last farmer-descendant of the old line. No longer able to make a living on the soil, he took up an urban occupation.

§ 5. **Sociological effects of agricultural decay.** Such changes caused a relative decline in the birthrate of the old American stock. The places of many of these long-settled families remained unfilled as thousands of abandoned farm houses testified. The places of others were taken by a tenantry, white or black, lacking the thrift of ownership; the lands of others passed to new owners of alien races. The populations of many rural neighborhoods thus became hetero-

[3] See Vol. I, p. 437.

geneous, with results calamitous to the social life. Once prosperous schools declined, once thronging country churches were deserted, and much of the old neighborhood democracy disappeared. When, about the year 1900, prosperity began slowly to return to the American countrysides in the form of rising prices of farm produce, it was in large part too late to remedy the evil, except as it may be done by generations of effort under more favoring conditions. There are merely suggested here some of the complex sociological effects of past economic changes in American agriculture. It is certain that in the future also the economic changes in this field will be related closely to social and political changes of a fundamental character.

§ 6. **Fewer, relatively, occupied in agriculture; use of machinery.** Probably ever since the first census in 1790, the relative number of agriculturists in this country has been decreasing. Beginning in 1880, the numbers of those occupied in agriculture for gain have been reported at the census dates in a form that makes them fairly comparable.[4]

The explanation of this decrease in the proportion of the population that is engaged in agriculture is twofold; the first is the real increase in the productive output per person in agricultural industry. In larger part this is due to the increasing use of machinery in place of simple hand tools, and the substitution of horse-, hydraulic-, windmill-, steam-, and

[4] It must be observed in studying these figures, that farmers' wives and children, working at home, are not reported as gainfully occupied. But a widow or a spinster owner, if herself acting as the enterpriser, is reported as "occupied" in agriculture. The increasing number of such cases in the past generation in part explains the growing number and percentage of females in agriculture.

	Number occupied in agriculture			*Per cent of all persons occupied*		
	Males	*Females*	*Both sexes*	*Males*	*Females*	*Both sexes*
1880...	7,068,658	594,385	7,663,043	47.9	22.5	44.1
1890...	7,787,539	678,824	8,466,363	41.4	17.3	37.2
1900...	9,272,315	977,336	10,249,651	39.0	18.4	35.3
1910...	10,582,039	1,806,584	12,388,623	35.2	22.4	32.5

gasoline-power for human labor. This change has been made readily in the regions of level fields, but of late has been made possible to a greater extent in hilly country, by rearranging and combining the old irregular fields into regular fairly level rectangular fields easily tillable, while turning the rougher lands and hillsides into wood lots and pastures.[5] One man, thus, driving three or four or more horses, can do the work formerly done by two or more men and do it just as well. The farmers' incomes in different parts of the country vary pretty nearly with the amount of horse-power used per man. Economies equally great are made in the work done in the barnyards and barns. In most parts of the country only a beginning has been made in these ways, and in future the census will continue to reflect the progress in these directions.

§ 7. **Transfer of work from farm to factory.** The other part of the explanation of the decrease in the proportion of the population that is engaged in agriculture is that many operations are, step by step, being transferred from the farm to the factory. "Agriculture," we have observed, is a great complex of industries, in which many different products are taken from the first simplest extractive stage, and then put through successive processes to make them more nearly fitted for their final uses. Not so long ago grain cut in the field was threshed, winnowed, shelled, made into flour, and baked on the farm, as it still is in many places. Logs were cut into boards, planed, and made into houses or furniture by the farmer. The old-time farmer made by hand a large number of his farm implements—rakes, ax handles, pumps, carts, and even wagons. Until a generation ago all butter, cheese, and other dairy products were made on the farm. Now these things are being done in steadily increasing proportion by workers classified as in the manufacturing industries, and agriculture contains fewer separate industries and

[5] See further, ch. 26, secs. 1 and 2 on the size of farms as an economic factor.

processes. Of course there is economy of labor in nearly all of these changes, but the number occupied in agriculture is greatly reduced. Many farmers and more farmers' sons are moving from agriculture into occupations of manufacturing, trade, transportation, and the professions, and are becoming more narrow specialists.

§ 8. **The rural exodus.** The percentage of persons in the rural population changes at about the same rate as does that of the persons occupied in agriculture. In 1890 it was 64, in 1900 it was 60, and in 1910 it was 54 per cent. The percentage of the population in cities of 8000 or more has steadily increased. This phenomenon has been marked in all of the countries that have been developing along industrial lines. It has been variously described as "the rural exodus," "the abandonment-of-the-farm-movement," and "the city-ward drift."[6] It is only in part explained by the change from agriculture to other occupations; perhaps even in greater part it is due to the decline and disappearance in many rural places of small manufacturing and mercantile businesses before the competition of large business in the cities. In much of the long-settled area of the country every hillside stream once turned a little mill to saw timber, grind corn, forge iron, or weave cloth. Most of these mills are now deserted. In countless villages the old blacksmith shop, once a center of business, is abandoned. Here and there a patriarchal smith still serves a dwindling group of customers and speaks with mingled pride and pathos of his sons, now in the automobile business in the city.

The movement away from the countryside has been but little counteracted as yet, but may be more in future, by the

[6] See above, sec. 2, on the distinction between rural and agricultural. In part the change here noted results from increases in the population of towns and incorporated places from a little below 2500 to something about 2500. For example, if there were 2499 persons in a town in 1900 they would all be classified as rural; if in 1910 there were 2500 or more they would all be classified as urban.

growing enjoyment of rural life, by the back-to-the-land movement, by interurban railways, by improved roads, and by automobiles.

§ 9. **The farmer's income in monetary terms.** Census figures and some additional investigations have led to the estimate of the average real income of the farmers of the United States in 1909, expressed in monetary terms, as $724. The estimated value of all products, whether sold or used by the farmer, plus the value of his house rent and fuel consumed by family, was $1236, from which expenditures of $512 are deducted for outside labor, and for materials used for operating and maintaining the farm. Of the $724 the sum of $402 is estimated to be the labor-income of the family and $322 is estimated to be the wealth-income (at 5 per cent of the capitalization of the farm). This was in a period of rising values in farm lands, averaging about $323 per farm annually, and this to most farmers was equivalent to so much monetary savings. The main items of net income, therefore, are as follows:

Rent	$125
Food from the farm	261
Fuel	35
Cash	303
Total	$724
Increase in value of farm	323
Total estimated monetary income	$1047

Of the total, $422 is a labor-income, and $645 is a wealth income.[7]

It would be difficult, even if the available statistics were much more exact than they are, to compare exactly the farmer's income with those of urban classes. Averages of such large numbers and over such a wide area have a limited sig-

[7] See Vol. I, p. 225, and note 11.

nificance in the specific case; and living conditions and the purchasing power of money are so different in country and city and in different parts of the country.[8]

§ 10. **Compensations of the farmer's life.** In bare monetary terms the average farmer's family gets a labor-income less than that of the ordinary wage-earner in a factory, and it is only by the aid of the wealth-income that it appears to fare as well or better. Even the few largest incomes made in farming are small in comparison with many of those made in commerce, transportation, and manufacturing. The great mass of farmers of the nation are hard-laboring men, poor in the eyes of the city dwellers.[9]

But this much is certain: the farmer's income in monetary terms has on the average much larger power to purchase the main goods of life (material and psychic goods) than it would have in town. Equally good house usance would cost more in nearly all towns, and much more in larger cities. Retail prices of the same food and fuel even in small towns would be much greater. The necessary outlay for clothes to maintain the class standard is much less for farmers than for city dwellers. Moreover, in the use of horses and carriages, and now of automobiles, and in the free control of his own time —in many elements of psychic income—the farmer is on a parity with men in other occupations of double or quadruple his income expressed in monetary terms.

Tho the farmer's working day in the busiest season of summer is very long compared with that of factory or office workers, his working day at other seasons is usually much shorter than the average urban worker's day. The farmer's life is nearly always free from the excessive pressure, haste, and competition of city life, and the value, to many a man, of the more natural and wholesome conditions of outdoor life and outdoor work are hardly to be measured in terms of even the most untainted dollars.

[8] See Vol. I, p. 206.

[9] See Vol. I, p. 227, note, for figures on owners and farm laborers.

§ 11. **Ownership and tenancy.** Since 1880, when the first figures on farm tenures were collected, the proportion of farms operated by owners has steadily decreased.

	Percentage of farms operated by		
	Owners	*Cash tenants*	*Share tenants*
1880	74.5	8.0	17.5
1890	71.6	10.0	18.4
1900	64.7	13.1	22.2
1910	63.0	13.0	24.0

These statistics arouse fears that the class of independent farmers operating their own farms is gradually giving way to a tenantry in America. But in some respects the figures are misleading unless carefully interpreted. The increasing proportion of tenants is due not so much to owners falling into the class of tenants as to the hired laborers rising into the class of tenants. The number of male operating owners compared with all male workers (not merely with all farms) has remained almost constant at about 42 per cent; while the per cent of hired workers has decreased from 43.3 (in 1880) to 41.4 (in 1890) and to 34.6 (in 1900). Most hired men on farms are farmers' sons; the city boy does not adapt himself readily to farm work. Most hired men of native stock become tenants, and finally owners. Only 11 per cent of the hired workers in agriculture (in 1900) were over 35 years of age.

The landlord of a farm let to a tenant, especially to a share tenant, is still to a large extent the general manager, controlling in a large measure through the renting contract and by his oversight, the operations of the farm. Older men find that letting the farm to a share tenant is easier for them and gives better results than continuing to operate the farm with hired labor. And it evidently gives a man a somewhat higher status to become a tenant than to continue to be a hired laborer. In the South this movement has taken on large proportions in the breaking up of large plantations once operated by the owner with hired labor, and now let in smaller lots to

operating tenants. Yet such a change appears, statistically, as a decrease in the proportion of farms operated by owners. Despite these somewhat reassuring facts, the problem of maintaining and increasing operating ownership of farms in America is one deserving of the most earnest thought and efforts. The best form of farm tenure is not necessarily that giving the best immediate economic results. Politically in a democratic nation, and sociologically in its effects upon the size of families and the raising of healthy children, the preservation of an independent American yeomanry is of fundamental importance to the nation.

The problem is as difficult as it is important, and becomes more difficult with the rise in the acreage value of lands and with the economical size of farms, both calling for a larger investment to become an owner. Changes in the system of taxation should be made with reference to this object; the system of agricultural credit should be developed and administered to assist; special efforts in agricultural education should be made and active administrative efforts should be directed, toward this important end.

CHAPTER 26

PROBLEMS OF AGRICULTURAL ECONOMICS

§ 1. Size of farms, and total farming area. § 2. Influences acting upon the size of farms. § 3. Self-sufficing versus commercial farming. § 4. Farming viewed as a capitalistic enterprise. § 5. Diversified versus specialized farming. § 6. Conditions favoring diversified farming. § 7. Intensive farming in Europe and America. § 8. Prospect of more intensive cultivation of land in America. § 9. The new agriculture. § 10. Difficulty of coöperation among farmers. § 11. Rapid growth of farmers' selling coöperation. § 12. Some economic features of farmers' selling coöperation. § 13. Coöperation in buying. § 14. Need of agricultural credit. § 15. Recent provisions for farm loans.

§ 1. **Size of farms, and total farming area.** The average area of farms has varied from a maximum of 203 acres, in 1850 (the first figures), to a minimum of 134 acres in 1880, being 138 acres in 1910. A better index, perhaps, is the average improved area per farm, which has been more nearly stationary, varying from a maximum of 80 acres in 1860 to a minimum of 71 acres in 1870 and 1880, being 75 acres in 1910. Here again the statistics require interpretation, for in the spread of the frontier the addition of large farms in the arid and semi-arid regions may raise the average, or the breaking up of large plantations in the South may decrease the average, without this indicating any essential change in the technical conditions of farming in the country generally. Since about 1900 the total area in farms has increased very slowly. Between 1900 and 1910 the increase was only 4.8 per cent; whereas a larger increase occurred in the area of improved land, 15.4 per cent, and the unimproved area in farms decreased 5.6. Future changes of farm areas may be expected

to be of this same nature, mainly in the improvement of rough pastures, swamps, partly cleared woodlands, and desert lands awaiting irrigation. An increasing population will have to be provided with food and other products of agriculture on a farming area that henceforth will be increasing less rapidly than it has in the past and than the population increases.

§ 2. **Influences acting upon the size of farms.** In these averages for the whole country many conflicting influences unite and neutralize each other. Making for smaller farms is the breaking up of large grazing areas in the West into smaller general purpose farms or irrigated fruit districts, and of larger general farms in the North and East into small poultry, flower, and fruit farms. Opposed to this is a movement toward the merging of farms of 50 to 100 acres into larger farms of 300 acres, more or less. The economic cause of this movement is interesting and important. The typical and economic size of farms when the Atlantic states were settled, was determined by the use of hand tools, which permitted a man and his family to operate a farm of about 75 acres of which about half was tilled and the rest was in permanent pasture and woodland. The fields were small and were laid out irregularly, which was no disadvantage for hand cultivation. But for the most economic use of land in field crops and under more modern conditions it is necessary to have pretty level fields, of regular rectangular shape. The farm unit should be of such extent as to permit of the proper use of the soil by rotation of crops, and to employ fully the best modern labor-saving machinery for each purpose. Numerous recent agricultural surveys point to the conclusion that for general farming this unit is a comparatively large area of about 300 acres.

These conditions offer a reward to those agricultural enterprisers who can purchase lands at a price based upon the high costs and lower yields of the older methods and cultivate them at the lower costs and with the larger yields of the newer methods. This movement, therefore, toward the consolidation of smaller into larger farms is likely to continue in many

communities for several decades. This is likewise an advantage to the community in increasing the production with less labor. But the net effect upon the social life of the countryside is more doubtful, and calls for careful consideration.

§ 3. **Self-sufficing versus commercial farming.** The typical American farming family once produced nearly everything it used, and used nearly everything it produced. It was very nearly a self-sufficing economic unit, "a closed economy," as it is sometimes called. Food, clothing, fuel, lumber, houses, furniture, tools, were on the farm carried through the various processes from the first gathering of the raw materials to the finished product. They were then consumed by the farm household. It is true that even in the first settlements there were some craftsmen—cobblers, millers, weavers, blacksmiths—whose services and wares were got by trading some of the surplus products from the farms—butter, cheese, eggs, wool, hides, furs, live stock, grain, lumber. A few rare commodities of foreign make found their way to the farm through peddlers and merchants; but altogether the goods produced outside the farm were a small fraction of the family's consumption, and were exchanged for but little of the farm's production. Most farmers tried to produce for themselves, as far as possible, everything their families needed, even when the soil and situation were poorly suited to the purposes. True, there were early some exceptions to the general rule, where only one kind of crop was taken from the land. Such was the forest product of masts, shingles, lumber, and turpentine, and the great southern staple, tobacco, and later, cotton. The exceptions have been tending to become the rule in more and more communities. Farmers have been specializing more and more in the kinds of products to which their farms are adapted in respect to soil, relation to market, and otherwise. These products are taken to market and sold for money with which are bought the things needed for use on the farm.

§ 4. **Farming viewed as a capitalistic enterprise.** Thus the farm comes to be looked upon more and more, not just as a home, but much as if it were a commercial enterprise or a factory, by which products are made for sale. This change, to be sure, is far from complete, as the figures for the average farmer's income show that a large share of the family living still comes from the farm. It has gone on much further in some districts than in others, as is indicated in the types of farming discussed below. But just to the extent that the farmer grows crops to sell, his outlook on his work undergoes a change. He is less exclusively a farmer, concerned with the technical processes of farming; he must be more largely a business man. Like a manufacturing enterpriser, he buys the factors of production, combines them into new products, and sells them again. He becomes interested in market conditions and prices. He grows more commercially-minded. He views the farm no longer as a fixed area, but one that may be enlarged by purchase or by rental, and that may be reduced by selling or letting the less needed parts. One-fifth of farm owners now rent additional land. In commercial farming the land is not contrasted with capital as something apart, consisting of the value of the equipment and stock; but the whole complex of land and other goods is thought of as a capital-investment. The greater ease of transferring landed-property in America and the greater mobility of our population have always made it more natural here than in Europe to look upon land as a capital investment. This view is now becoming more general as a result of the commercializing of farming enterprise.

This change has been favored by other influences. Particularly has the use of machinery and of other equipment, calling for a larger investment per man and per acre, been making agriculture, in its form of enterprise, more and more like manufacturing and commercial undertakings.

§ 5. **Diversified versus specialized farming.** To be self-sufficing a farming family must carry on general farming,

that is, must produce a diversity of products. As farming becomes more commercialized it necessarily becomes somewhat more specialized, and produces a smaller variety of products. In some parts of the country and on particular farms this specialization is extreme: in California, citrus fruits, or prunes, or beans, may be the only crop raised; wheat in Kansas and the Dakotas, and dairy products in thousands of farms surrounding the great cities, are the main, tho not the exclusive products. Many farmers in these districts have no gardens or orchards, keep no cow, and buy much or all of the grain for their horses, as well as milk, butter, vegetables and fruits for their own use. Poultry and eggs are shipped in trainloads two thousand miles from the Middle West to California to be consumed by orange growers. Many farmers in the East no longer keep sheep, pigs, or beef cattle, and they buy out of the butcher's wagon all the meat except fowls used by their families. This partly explains the decrease of live stock in the whole country in recent years and the increase in the price of meat.

§ 6. **Conditions favoring diversified farming.** There are, however, limits to the net advantage of specialization in crops, and competent authorities on agriculture question whether in many cases that limit has not been reached and passed. Most farms have a variety of soils and of conditions—hilltops, slopes, bottom lands—which are suitable for different purposes. A rotation of crops is necessary to get good yields. Live stock must be kept to maintain the fertility of the land, which deteriorates fast if hay and grain are continually sold. Some live stock can be kept on every farm very cheaply with the food that would go to waste otherwise. The specialization in stock raising in the prairie states ceased to be profitable when lands became more valuable. Specialization in wheat production in the states just west of the Mississippi is possible only so long as wheat will grow on the virgin soil without costly fertilizers. The cotton farmers of the South, especially

the negro farmers, have been forced by debt and thriftlessness into a one-crop policy that is now seen to be wasteful in the long run. A variety of production is necessary to employ labor somewhat regularly on a farm throughout the year. These and other conditions will make most farming always an industry of comparatively diversified products. Only 1 per cent of the farms get as much as 40 per cent of their receipts from fruit; 2 per cent get that much from tobacco; 3 per cent from vegetables; 6 per cent from dairy products; and 19 per cent from cotton. The remaining 60 per cent of receipts were in most cases from various sources, and these figures did not include the value of produce consumed by the farmer's family.

§ 7. **Intensive farming in Europe and America.** No other farm problem interests the city man so much as that of increasing the production of the land. To most city men farming hardly seems to be an occupation giving livelihood and life to the farmer; it seems rather to exist for the sole purpose of feeding men living in cities. The city man, therefore, measures the success of farming not by the farmer's income, by the level of countryside prosperity, but by the number of bushels per acre raised to ship to town. Every city newspaper and magazine contains articles pointing to the fact that larger crops per acre are raised in Europe than in America, and broadly suggesting that the American farmer could do as well, if only he would. Foreign travelers comment in like vein on the wasteful use of land in America as compared with farming methods in Europe.

Land is used most extensively, with respect to labor, when it is in forests; somewhat less so when in pasture as care must be given to the live stock; and still less when used for hay, grain, and other crops. But the use of machinery in large fields is far more extensive than the patient work of peasants with their hand tools. The more labor or the more equipment (or both together) that is put upon an acre, the larger the

product, but the larger the cost per unit. It is a familiar economic principle.[1] It would bankrupt any farmer, excepting the millionaire amateur, to farm in America by European methods. American farmers, at least many of them, could raise as many bushels per acre and keep their farms as thoroly cultivated as do the European peasants, if wages were as low here as are the peasants' incomes.

§ 8. **Prospect of more intensive cultivation of land in America.** As the aggregate need for food increases in America there must come a steady pressure upon our stock of land uses, resulting in decreasing returns to labor in agriculture, unless this movement can be counteracted by the spread of better methods in agriculture—not European peasant methods, but new American methods consistent with high labor-incomes. A good deal of our farm land is undoubtedly too intensively used now in view of present and prospective commodity prices and wages. Maladjustment of land uses has resulted from mistaken judgment, from changing conditions as to prices, transportation, and markets, and from loss of soil fertility. There are thus, on nearly every old farm, some fields that would better be in pasture and much hillside pasture that would better be woodland. It is often declared extravagantly that our country could support easily the total population of China, or as great a population per square mile as that of Italy. If it did so it would be only on the penalty of lowering wages toward, if not quite to, the level of the Chinese coolie or of the Italian peasant. Great metropolitan dailies gravely present as an argument in favor of unrestricted immigration, the proposition that "if" the cheaper immigrants would but go upon our "waste" land (which they refuse to do), and raise food by European methods the problem of the rising cost of food in the cities would be solved. This urban ideal of a frugal, low-paid agricultural peasantry can hardly be adopted in America as the national ideal. Rather, it would seem, any movement

[1] See Vol. I, chs. 12 and 13 on proportionality and usance.

toward more intensive agriculture that necessitates a lowering of the standard of living of the masses of the American people will, when it is recognized, be condemned and opposed.

§ 9. **The new agriculture.** Agricultural method, the technic of farming, has been constantly progressing for two hundred years in Europe and in America. Were it not for this, the great growth of population on this combined area would have been quite impossible. But the betterments since about 1890 in America have been especially great. They are mostly the first large fruits of the scientific study made possible by the land-grant colleges and agricultural experiment stations fostered by state and national legislation. These many diverse improvements are grouped under the general title of "the new agriculture." Its chief features are: new machinery and other labor-saving methods; better methods of cultivation of the soil; better selection of seed; introduction of new plants and trees from abroad to utilize low-grade lands; plant-breeding to develop new varieties of better quality, heavier bearing, or immune to disease; more efficient and economical ways of maintaining soil fertility; better methods of marketing; and better technical education of the individual farmer. Each of these topics, and a number of other minor ones, would require a chapter in a complete treatise on agricultural economics. Here this mere enumeration must be allowed to convey its own suggestion of far-reaching results for the whole political economy of the nation and of the world.

Indeed, so much has been written in a Barnumesque way of the wonders of the new agriculture, that its actual results and further possibilities are in many minds absurdly exaggerated. It has not as yet been potent enough to prevent diminishing returns in respect to the great staple foods and raw materials obtained by agriculture. It apparently has barely kept pace with the needs of the growing population of Christendom. It has enabled a larger population to exist in about the same, if not in a worse condition, on the same area, while progress

in cheapness of goods has come almost entirely from the side of the chemical and the mechanical industries. It does not give the promise of an indefinite amelioration of the lot of an indefinitely multiplying population. But to a population slowly increasing, a new and ever newer agriculture, utilizing constantly the achievements of the natural sciences and the mechanic arts, ensures the possibility of a steady betterment of the popular welfare in city and in open country alike.

§ 10. **Difficulty of coöperation among farmers.** Rural communities are proverbially conservative; the American farmer is proverbially an individualist. No wonder, then, that the new ideas and plans of coöperation in business matters have made headway in agriculture slowly and with difficulty. The need of mutual aid among American farmers is especially great, for, as has often been said, isolation is the problem of the farm as congestion is that of the city. On the frontier a coöperative spirit manifested itself frequently in mutual helpfulness, in house raising bees, husking bees, threshing bees, and other similar gatherings.

But this spirit seems to have almost disappeared in the older communities, the more rapidly doubtless in the period of decaying agricultural prosperity.[2] To-day, for example, it is impossible on a certain Pennsylvania road for one more progressive farmer to get his neighbors to coöperate in so simple a matter as hauling their milk cans to the creamery, and so every day in the year ten horses are hitched to ten delivery wagons carrying two or three milk cans apiece, and driven by ten drivers along the same road to and from the railroad station. One driver and two horses could easily carry as much or more, as is done now in many other dairy districts. Even of successful coöperation among farmers sympathetic critics are forced to say: "Many students of rural economics assert that coöperation as applied to the distribution and marketing of farm products is not very successful unless it is founded upon dire necessity. When the

[2] See ch. 25, secs. 4 and 5.

records of the organizations of the country are analyzed it becomes almost necessary to accept that statement. So long as farmers do fairly well in their own way they are not inclined to coöperate."

§ 11. **Rapid growth of farmers' selling coöperation.** Despite what has just been said, coöperation among farmers now is more developed and is growing faster than all other kinds of coöperation in America. This is most marked in farming communities in the West, especially in California and in the Middle Western or Northwestern states (e.g., Minnesota and Wisconsin). There the farmers are younger, and many have been educated in the state agricultural colleges. They all produce nearly the same kinds of crops of staple produce which must be shipped to distant markets. The need of uniting to get what they thought would be fair treatment from the railroads, and to protect themselves against the abuses of the competitive commission salesagents, seems to have given the first impetus to farmers' coöperation.

The most notable developments were those of the California Fruit Exchange and of coöperative societies of the Northwest for marketing grain. The membership of the former is made up entirely of the local citrus growers' associations in California. It has a complete organization of selling agents in the Eastern cities and a remarkably efficient, tho simple, system of equalizing and expediting shipments. Now the agricultural coöperative associations of various kinds are multiplying all over the country, for shipping live stock, fruits, butter, cheese, and other farm products. Coöperation for these purposes called forth new activities; packing houses were built, and grain elevators and creameries and dairies, and now a goodly number of the simple manufacturing processes are undertaken by these societies, now numbering thousands.

§ 12. **Some economic features of farmers' selling coöperation.** This type of producers' selling coöperation is proving in America to be far more successful than producers' co-

operation among workingmen;[3] and certain important economic features in it should be noted. The local producers' selling coöperative society is composed of farmers who as enterprisers own and carry on their own separate businesses; they are not, as in the other case, wageworkers. Any productive processes undertaken by this kind of society are subordinate to the main business, being such as picking, packing, drying, preserving, and making boxes for packing. This form of coöperation with the related form of consumers' cooperation that is fostered by it, promises to have a wide extension.

Some of these societies, as those dealing in citrus fruits, regulate with some success the picking and the marketing so as to distribute them more evenly throughout the year. They watch the markets and direct their agents by telegraph to divert cars *en route* away from markets that are glutted with products and into markets where prices are higher. They take some of the products, as eggs in the spring at the period of low prices, and pack or refrigerate them, to be sold when prices are higher. For thus withholding the supply they are said by some to exercise a monopolistic power. But this is a more than doubtful view. So long as only the seasonal variations are equalized and the total supply of the year is not reduced it is, on the marginal principle, an economic service to the consumers, comparable to insurance in its utility. Any reduction of the area planted or of the entrance of others into the industry would be a monopolistic act but this as yet has not occurred.

§ 13. **Coöperation in buying.** Coöperative buying (called also consumers' coöperation or distributive coöperation) has had a large growth in the British Isles, since 1844, when the society called the Rochdale Pioneers was founded by a group of factory workingmen. The coöperative stores, both in Great Britain and on the Continent, have continued to develop mainly among the industrial classes in urban centers. How-

[3] See above, ch. 19, secs. 13, 14, 15.

ever, this has not been exclusively the case, and particularly in Denmark and Ireland coöperative buying has increased in agriculture in connection with selling associations. Since 1890 the growth of consumers' coöperation among European industrial wage-earners has been phenomenal, especially in Belgium, Germany, and Switzerland. American wage-workers, however, have made few and feeble efforts in this direction.

In the period beginning 1867 many coöperative stores were founded in America by farmers in the Grange movement, who operated also grain elevators, warehouses, and steamboat lines. But the movement failed about 1877. This result is easily explained by lack of commercial knowledge and lack of harmony among the members, selling on credit, and inefficient management. A new era in consumers' coöperation for farmers began about 1900 and now in several widely separated parts of the country—Minnesota, Kansas, California, Washington, and elsewhere—the movement is spreading rapidly, supported in large part by the same persons who are members of the selling associations.

§ 14. **Need of agricultural credit.** Banking originated in cities and for the use of the merchant-class. It still retains pretty faithfully its commercial character. The change of farming toward a more commercial form [4] has been little aided by banking credit. National banks and many others were forbidden in their charters to lend on the security of real-estate, the farmer's one business asset.[5] A great number of farms are always in course of being purchased, the balance of purchase money being borrowed by the purchaser. A group of private agencies such as life insurance and mortgage loan companies and local money lenders has supplied in somewhat costly ways the need of farm credits. Tho rates of interest have become more equalized throughout the whole country, they still range between 7 and 10 per cent in the Southern and Western states, averaging 7 per cent in the

[4] See above, sec. 3.

[5] See ch. 8, sec. 8.

whole country for interest and commission. The need of better opportunities for credit in the agricultural districts has long been recognized. The high rate of interest for borrowed money necessarily placed a limit on improvements in equipment and methods of farming.[6]

§ 15. **Recent provisions for farm loans.** The Federal Reserve Act made two important changes to improve agricultural credit.[7] Soon afterward some of the states took more vigorous action to provide a special system of agricultural credit, especially New York and Missouri. In the latter state, on the initiative of a public-spirited citizen of St. Louis, was passed in 1915 a notable act of legislation known as the Gardner State Land Bank Act (effective December 1, 1916, provided a constitutional amendment is adopted in November, 1916). This authorizes the establishment of a land bank, with power to lend on the security of farming lands, for buying farms and for productive improvements, and to issue bonds to be sold to investors.

Following this general plan the Federal Farm Loan Act became law July 17, 1916. It authorized the establishment of twelve Federal Land Banks, each with a capital of not less than $750,000 to make loans through national farm loan associations organized somewhat after the model of the building and loan associations. The bonds issued by these banks are to bear not to exceed 5 per cent interest. It is hoped that they will have the high credit of municipal bonds so that they may be sold at parity, bearing interest at 4 or 4.5 per cent. The loan is repaid by the farmers under a regular plan of amortization. The practical results of these measures are yet to appear. They are expected to give to loans that are made on the security of farms as wide a market and as high credit as state and municipal bonds now have. They bid fair to bring the rate of interest on long-time loans to farmers down

[6] See Vol. I, pp. 495–497, on the relation between lower interest rates and productive processes..

[7] See ch. 9, sec. 7 on time deposits, and sec. 9 on farm loans.

to 5 per cent or less in the remotest parts of the land. This will stimulate agricultural improvement, and facilitate the purchase of land by tenants. Where the interest rate has been the highest it should raise the value of farm lands as it brings them within the circle of a lower-interest-rate economy. This may hasten the transfer of the lands from less provident to more provident owners, who are willing to take the land at a higher capitalization. But the system of loans will probably help to develop greater thrift in the younger farming population.

CHAPTER 27

THE RAILROAD PROBLEM

§ 1. Rise of the corporation concept. § 2. The modern era of corporations. § 3. Beginning of corporation problems. § 4. The era of canals. § 5. Rapid building of American railroads. § 6. Reasons for governmental aid. § 7. Kinds of governmental aid. § 8. Emergence of the railroad problem. § 9. Discrimination as to goods. § 10. Local discrimination. § 11. Personal discrimination. § 12. Economic power of railroad managers. § 13. Political power of railroad managers. § 14. Consolidation of railroads. § 15. State railroad commissions. § 16. Passage of the Interstate Commerce Act. § 17. Working of the Act. § 18. Public nature of the railroad franchise. § 19. Other peculiar privileges of railroads. § 20. Private and public interests to be harmonized.

§ 1. **Rise of the corporation concept.** In the legal systems of primitive people and long afterward, only natural persons had legal rights, could make contracts, have property, and carry on a business. But in a number of cases, very early, groups of men came to have certain interests in common and certain possessions. Gradually some such groups gained more or less of legal recognition, with certain political and economic rights as a body and not as individuals. Thus evolved the conception of a "corporation" (body) having men as "members," an artificial person, yet not the same as any one or as all the individuals together, and legally distinct from the individuals. A group of burghers obtaining a charter from the lord of the realm became a municipal corporation; a group of teachers, a *collegium*, became the corporation of the college or a university (a number of persons united into one association); a group of craftsmen became a gild-corporation. Each corporation had certain

rights, privileges, and immunities, and used a corporate seal as a signature. All of the early corporations had some economic features that were incidental to the main purposes, which were political, ecclesiastical, educational, and fraternal. Toward the end of the Middle Ages groups of traders obtained charters to act as corporations permanently for business purposes, such as foreign trade, colonization, and banking. These increased in the sixteenth and seventeenth centuries, and in the eighteenth century this form of organization was adopted also and parliamentary charters obtained, by groups of men for building turnpikes and canals and for carrying on other kinds of business.

§ 2. **The modern era of corporations.** The great era of the corporations did not begin, however, until well on in the second quarter of the nineteenth century. Then, both in Europe and in America, the corporate form of organization was extended to a greater number, and to other kinds, of enterprises. It proved itself to be well adapted to enterprises for the construction and operation of canals and railroads, requiring a larger amount of capital than usually could or would be risked by one person. The investor in a corporation bought shares, and his liability for debts and losses was limited by charter to his share capital. It is an advantage that permanent enterprises of that kind are owned by corporations with charters perpetual or for long periods. It is possible for corporations to make investments running for longer periods than would be safe for individuals. The corporation with an unlimited charter has legally an immortal life. Sale and change of management are not necessary on the death or failure in health of any one owner. As the factory system and large production developed, the corporate form of organization was found to have these same advantages in manufacturing. It appeared in textile, iron, mercantile, and other industries. After 1865 the corporate form of organization increased at a cumulative rate, until now it is applied to many enterprises of small extent and local in operation.

There are 300,000 corporations making returns to the United States Commissioner of Internal Revenue.[1] There were 70,000 manufacturing corporations, which were 26 per cent of the whole number of manufacturing establishments, but which employed 76 per cent of all wage earners and turned out 79 per cent of the whole product.

§ 3. **Beginning of corporation problems.** With the corporations came "the corporation problem," a single name for a complex of problems—legal, political, moral, and economic—which arise out of the relations of corporations to their individual stockholders, to their employees, to the state, to the general public, and to their competitors in business. The problems differ also in corporations of different sizes and in different businesses. We shall discuss in this and succeeding chapters but a few of the larger aspects of the corporation problem, the railroad, the industrial trust, and certain other kinds of monopolistic industry.

Of the various forms of corporations, banks first presented problems calling for economic legislation and regulation. This is explained by the fact that it was the first kind of business corporation to become important, and further by the fact that its work was in various ways closely connected with the coinage and regulation of money, which had already become a governmental function. The railroad was the form of corporation next in point of time to become a great problem; this because of the peculiarly vital and far-reaching effects that such railroad transportation has upon all other kinds of business in the community, as appears in what follows.

§ 4. **The era of canals.** Canals were used in the ancient empires for irrigating, for the supplying of cities with water, and for navigation. In the late eighteenth and the early nineteenth centuries they were rapidly built in England and America. Six canals had been built in the United States

[1] Returns for 1915. The following figures are from the census taken in 1909.

before 1807, but the "canal-era" in America dated from the beginning of work on the Erie canal in 1817, and continued until about 1840, when nearly all new work ceased; over 4000 miles of canals had been built at a cost of $200,000,000.

The great advantage of canals is cheapness of operation due to the simplicity of the machinery needed and to the great loads that can be moved with small power. A cent a ton-mile proved to be a paying rate on a small canal. For heavy, slow-moving freight, a railroad can even now barely rival a parallel canal at its best. As canals, however, can be built only along pretty level routes and where the water supply is at high level, their construction is limited to a small portion of the country. The principle of diminishing returns applies strongly to the construction of canals; the first canals in favored locations are easily constructed and economically operated, but it is only with greater cost and difficulty that the system can be successively extended. In temperate climates the use of canals is limited by ice to a part of the year, and by the summer's drought sometimes still further. At its best, therefore, the small land-locked canal is fitted only to be a supplementary agent in the system of transportation wherever another transportation agency of higher speed and greater regularity is possible. Far different is the case of the oceanic canal in a tropical climate.

Canals do not appear to have developed any serious problems calling for public regulation of rates. A first simple legislative act fixing the rate of tolls for boats was sufficient. Charges were made by distance as on a toll road and the boats were owned by different private shippers or by common carriers among whom competition prevailed.

§ 5. **Rapid building of American railroads.** The canal was just reaching the peak of popular favor when the railroad in 1830, after a half-century of slowly accumulating technical improvements, burst into view as a demonstrated success as a means of transportation.[2] The railroad excels

[2] See A. T. Hadley, "Railroad Transportation," pp. 10, 32.

in adaptability any other agent of transportation; it can go over mountains or tunnel through them. It is markedly superior in certainty; it may be blocked for a day or two by floods and snows, but it suffers no seasonal stoppage of traffic. In speed, even the early railroad so far excelled that the canal could survive only by dividing the traffic, taking the lower grades of freight, and leaving to the railroad the passenger traffic and fast freight. Even in respect to cheapness, the unique virtue of waterways in favored localities, the railroad made rapid gains. Improvements in roadbed, rails, cars, engines, and other equipment soon reduced greatly the cost of conducting traffic on the main lines of roads. Because of these qualities railroads soon surpassed in importance every other agency of internal transportation. The miles constructed and miles in operation in the United States, by decades since 1830 were as follows (route mileage, not counting double tracks and sidings):

	Miles constructed in decade.	*Total route miles in operation.*
1830	23	23
1840	2,795	2,818
1850	6,203	9,021
1860	21,605	30,626
1870	22,296	52,922
1880	40,345	93,267
1890	73,924	167,191
1900	31,773	198,964
1910	51,028	249,992
1915 (5 yrs.)	13,555	263,547

The extension of railroads was so rapid that there was not time for a gradual adjustment of industrial conditions. In many places the resulting changes were revolutionary. The building of railroads in the Mississippi valley in the seventies lowered the value of eastern farms, ruined many English farmers, and depressed the condition of the peasantry in all western Europe.[3] With the lower prices that resulted when the fertile lands of the western prairies were opened to the

[3] See Vol. I, pp. 437, 438, 443.

world's markets, the less fertile lands of the older districts could not compete. Many other changes, of no less moment in limited districts, resulted from the building of railroads. Local trading-centers decreased in importance. Villages and towns, hoping to be enriched by the railroads, saw their trade going to the cities. Commerce became centralized. Enormous increases of value at a few points were offset by losses in other localities.

§ 6. **Reasons for governmental aid.** The growth of railroads in America was more rapid than in any other part of the world, but it did not occur without much help to private capital from governmental agencies. The railroad enterprise was uncertain, the possibilities of its growth could not be foreseen, and private capital would not invest without great inducements. In European countries the railways were built through comparatively densely populated districts to connect cities already of large size. Yet railroad extension was very slow there, even tho the states in many ways aided the enterprises. America was comparatively sparsely populated, and most of the railroads were built in advance of and to attract population, business, and traffic. In many cases railroad building in America was part of a gigantic real-estate speculation undertaken collectively by the taxpayers of the communities.

§ 7. **Kinds of governmental aid.** American states recklessly abandoned the policy of non-interference, and vied with each other in giving railroad enterprises lands, money, and privileges, in loaning bonds, in subscribing for stock, and in releasing from taxation. These fostering measures were expected to increase wealth and to diffuse a greater welfare throughout the community. Many states were forced to the point of bankruptcy by their reckless generosity, and some states repudiated the debts thus incurred.

The national government then took up the same policy and granted lands to the states to be used for this purpose. The first case of this kind was the grant to the Illinois Central

road, in 1850, of a great strip of land through the state from north to south. Grants were made in fourteen states, covering tens of millions of acres of land. Then the national government, between 1863 and 1869, aided the building of the Pacific railroads by granting outright twenty square miles of land for every mile of track and by loaning the credit of the government to the extent of fifty million dollars,—a debt which was settled by compromise only after thirty years.

Counties, townships, cities, and villages then entered into keen competition to secure the building of railroads, projected by private enterprise. Bonds, bonuses, tax-exemptions, and many special privileges were granted. To obtain this new Aladdin's lamp, this great wealth-bringer, localities mortgaged their prosperity for years to come. The promoters bargained skilfully for these grants, playing off town against town, cultivating the speculative spirit, punishing the obdurate. Not the civil engineer, but the railroad promoter determined the devious lines of many a railroad on the level prairies of America. The effects of these grants were in many cases disastrous, and after 1870 they were forbidden in a number of states by legislation and by constitutional amendments. But before this era of generosity ended, probably the railroads in America had received more public aid than has ever been given to any other form of industry in private hands.

§ 8. **Emergence of the railroad problem.** In most charters and laws authorizing the building of railroads, either nothing was specified regarding rates, or maximum rates were fixed which proved to be so high that they were of little, if any, practical effect. But very soon began to appear some serious evils in the policy of railroads toward the shipping and traveling public in matters of rates and of service.

As the ownership of the wagons, ships, and canal-boats of a country is usually divided, ocean ports and points along the lines of turnpikes and canals enjoy competition between carriers. In the early days of the railroads it was believed

that a company or the government would own the rails and charge toll to the different carriers, who would own cars and conduct the traffic as was done on the canals. Experience soon showed the impracticability of this scheme and the need of unified management. An operating railroad company, therefore, has a monopoly at all points on its line not touched by other carriers. This, like any other monopoly, is limited, for the railroad, to secure traffic, is led to meet competition of whatever kind—that of wagons, canals, rivers, or of other railroads—wherever it occurs. The railroads in private hands early began to "charge what the traffic would bear," high where they could, and low where they must, to get the business. Thus developed the various forms of discrimination which are now to be described.

§ 9. **Discrimination as to goods.** Discrimination as to goods is charging more for transporting one kind of goods than for another without a corresponding difference in the cost. When reasonably understood, this proposition does not apply to a higher charge for goods of greater bulk, as more per pound for feathers than for iron, the "dead weight" of car being much greater in one case than in the other. It does not apply where there is a difference in risk, as between bricks and powder, or coal and crockery; nor where there is a difference in trouble, as between live stock and wheat. Any difference that can reasonably be explained as due to a difference in cost is not discrimination; on the other hand a difference in cost without a difference in rate is discrimination. Discrimination as to goods may be by value, as low rates for heavy, cheap goods, and high rates for lighter, valuable ones. Coal always goes at a low rate as compared with dry goods, and sometimes more is charged for coal to be used for gas than for coal to be used for heating purposes.

Railroad discrimination so frequently has resulted in injustice to the shipping public that the term has taken on an evil significance. But it is well to observe that the word discrimination is not derived from *crimen* (crime), but from

discernere (to discern). There are both reasonable and unreasonable forms of discrimination. In general discrimination as to goods more often appears, under certain conditions and made with due regard to the public interest, to be reasonable; less often to be justified is the form of local discrimination, next to be described; and least often of all to be justified is the last named form of personal discrimination.

§ 10. **Local discrimination.** Discrimination between places (called also local discrimination) is charging different rates to two localities for substantially the same service. This occurs when local rates are high and through rates are low; when rates at local points are high and at competing points are low; when less is charged for shipments consigned to foreign ports than for domestic shipments; when more is charged for goods going east than for goods going west. The causes of local discrimination are: first, water-competition, found at great trade centers such as New York and San Francisco; second, differences in terminal facilities, making some places better shipping-points than others; third, competition by other railroads, which is concentrated at certain points, only one tenth of the stations of the United States being junctions; fourth, the influence of powerful individuals or large corporations and the personal favoritism shown by railroad officials.

The effects of local discrimination are to develop some districts and depress others; to stimulate cities and blight villages; to destroy established industries; to foster monopolies at favored points; and to sacrifice the future revenues of the road by forcing industry to move to the competing points to get the low rates. The power of railroad officials arbitrarily to cause rates to rise or fall is happily limited in practice by the need of earning as large and as regular an income as possible, but even as exercised it has been at times as great as that possessed by many political rulers.

§ 11. **Personal discrimination.** Discrimination between shippers (personal discrimination) is charging one person more than another for substantially the same service. This

most odious of railroad vices, rarely practised openly, is done by false billing of weight, by wrong descriptions or false classification to reduce the charge below published rate-sheets, by carrying some goods free, by issuing passes to some and not to all patrons under the same conditions, or by donations or rebates after the regular rate has been paid. In some cases a subordinate agent shares his commission with the shipper, and the transaction does not appear on the books of the company. In other cases favored shippers are given secret information that the rate is to be changed, so that they are enabled to regulate their shipments to secure the lower rate.

One group of reasons for personal discrimination is connected with the interests of the road. It is to build up new business; it is to make competition with rival roads more effective by favoring certain agents, as was very commonly done in the Western grain business; it is to exclude competition, as by refusing to make a rate from a connecting line or to receive materials for a new railroad which is to be a competitor; and it is to satisfy large shippers whose power, skill, and persistence make the concession necessary. Another group of reasons has to do with the interests of the corporate officials. It is to enable them to grant special favors to friends; or it is to build up a business in which they are interested; or it is to earn a bribe that has been given them.

The evils of personal discrimination are great. It introduces uncertainty, fear, and danger into all business; it causes business men to waste, socially viewed, an enormous fund of energy to get good rates and to guard against surprises; it grants unearned fortunes and destroys those honestly made; it gives enormous power and presents strong temptations to railroad officials to injure the interests of the stockholders on the one hand and of the public on the other.

§ 12. **Economic power of railroad managers.** Other evils of unregulated private management of railroads appeared. When the railroad was a young industry, it was

thought to be simply an iron-track turnpike to which the old English law of common carriers would apply. This and similar notions soon, however, proved illusory. It was seen that the higher railroad officials had, in the granting of transportation service and the fixing of rates, a great economic power. They had complex and sometimes conflicting duties to the stockholders and to the shipping public. They wore their conscience-burdens lightly, before the days of effective regulation, and frequently made little attempt to meet the one and no attempt whatever to meet the other obligation. The opportunities for private speculation brought to many railroad managers great private fortunes. There were no precedents, no ripened public opinion, no established code of ethics, to govern. It was a betrayal of the interests of the stockholders when directors formed "construction companies" and granted contracts to themselves at outrageously high prices. It was an injury not only to shippers, but also to the stockholders, when special rates were granted to friends and to industries in which the directors were interested. In general, however, the interests and rights of the stockholders were more readily recognized than were those of the public. A railroad manager is engaged by the stockholders, is responsible to them, and looks to them for his promotion. Hence their interests are uppermost whenever the welfare of the public is not in harmony with the earning of liberal dividends. The managers long felt bound to defend the principle of "charging what the traffic will bear" in the case of each individual, locality, and kind of goods, even if this ruined some men and enriched others, and if it destroyed the prosperity of cities to increase the earnings of the road.

§ 13. **Political power of railroad managers.** Likewise in various ways railroad managers may exercise great political influence and power. Some writers maintain that the power to make rates on railroads is a power of taxation. They point out that if rates are not subject to fixed rules imposed by the state, the private managers of railroads wield the power

of the lawmaker. By changing the rates on foreign exports or imports, the railroads frequently have made or nullified tariff rates and have defeated the intention of the legislature. High rates on state-owned roads in Europe have been used in lieu of protective duties. These facts go to show that a change of railroad rates between two places within the country is similar in effect to the imposing or repeal of tariff duties between them.

The wealth and industrial importance of the railroads soon began to give them widespread political power in other ways. It was commonly charged in some states that the legislature and the courts were "owned" by the railroads. The railroads, in part because they were the victims at times of attempts at blackmail by dishonest public officials, declared that they were compelled in self-defense to maintain a lobby. The railroad lobby, defensive and offensive, was, in many states, the all-powerful "third house." Railroads even had their agents in the primaries, entered political conventions, dictated nominations from the lowest office up to that of governor, and elected judges and legislators. The extent to which this was done differed according as the railroads had large or small interests within the state. These statements can with approximate truth now be made in the past tense, as was not possible a few years ago. A better code of business morality has developed, and the railroad management's relationship of private trusteeship toward the shareholders and of public trusteeship toward the patrons of the road is now much more fully recognized. The change was not brought about without long and strenuous agitation and effort, educational and legislative, as is in part described below.

§ 14. **Consolidation of railroads.** Gradually the consolidation of the railroad mileage into larger units put into fewer hands greater and greater economic power. The early railroads, many of which were built in sections of a few miles in length, have been slowly welded into continuous trunk lines

with many branches. The New York Central between Albany and Buffalo was a consolidation, by Commodore Vanderbilt, of sixteen short lines. The Pennsylvania system was formed link by link from scores of small roads. In the decade of the nineties the growth of consolidation went on more rapidly than ever before. In 1903 it could be said that 60 per cent of the mileage of the United States was under the control of five interests; 75 per cent was controlled by a group of men who could sit about one table. The country was being divided territorially into great railroad domains, within each of which one financial interest was dominant. Since that time the policy of the leading roads has been still further unified by great financial alliances and by the method known as "community of interests."

Toward this result strong economic forces have been working. Consolidation has many technical advantages: it saves time, reduces the unit cost of administration and of handling goods, gives better use of the rolling stock and of the terminal facilities of the railroads, and insures continuous train service. It has the advantages of other large production and the possible economies of the trusts. Most important, however, from the point of view of the railroads, is the prevention of competition and the making possible of higher rates and larger dividends. The statement that competition is not an effective regulator of railroads often is misunderstood to mean that it in no way acts on rates. It is true that competition between roads does not prevent discrimination and excessive charges between stations on one line only; but competition usually has acted powerfully at well-recognized "competing points." The larger the area controlled by one management, the fewer are the competing points; the larger, therefore, is the power over the rate and the more completely the monopoly principle applies. It is a grim jest to say that consolidation does not change the railroad situation as regards the question of rates.

§ 15. **State railroad commissions.** When it became evi-

dent that public and private interests in the railroads were so divergent, it still was not easy to determine how the public was to be safeguarded. At first, some general conditions such as maximum rates were inserted in the laws and charters; but these were not adaptable to changing conditions and, for lack of administrative agents, could not be enforced. Some early efforts at state ownership were disastrous. The old law of common carriers gave to individual shippers an uncertain redress in the courts for unreasonable rates; but the remedy was costly because the aggrieved shipper had to employ counsel, to gather evidence, and to risk the penalty of failure; it was slow, for, while delay was death to the shipper's business, cases hung for months or years in the courts; it was ineffectual, for, even when the case was won, the shipper was not repaid for all his losses, and the same discrimination could be immediately repeated against him and other shippers.

In the older Eastern states, attempts to remedy these and other evils by creating some kind of a state railroad commission date back to the fifties of the last century. Massachusetts developed in the seventies a commission of "the advisory type" which investigated and made public the conditions, leaving to public opinion the correction of the evils. A number of the Western states, notably Illinois and Iowa, developed in the seventies commissions of "the strong type," with power to fix rates and to enforce their rulings. The commission principle, strongly opposed at first by the railroads, was upheld by the courts and became established public policy. By 1915 every state and the District of Columbia had a state commission. In Wisconsin and in New York, in 1907, in New Jersey, in 1911, and in many other states since, the "railroad" commissions were replaced by "public utilities" or "public service" commissions, having control not only over the railroads but over street railway, gas, electric light, telephone, and some other corporations. The state commissions have found their chief field in the regula-

tion of local utilities, and they fall far short of a solution of the railroad problem. Altho they from the first did much to make the accounts of the railroads intelligible, something to make the local rates reasonable and subject to rule, and much to educate public sentiment, on the whole their results have been disappointing. It was difficult to get commissioners at once strong, able, and honest; the public did not know its own mind well enough to support the commissions properly; and the courts decided that state commissions could regulate only the traffic originating and ending within the state.

§ 16. **Passage of the Interstate Commerce Act.** Public hostility to private railroad management was greatest in the regions where the most rapid building of roads occurred from 1866 to 1873. One center of grievances was in "the granger states" of Illinois, Wisconsin, Kansas, Nebraska, Iowa, and Minnesota; another center was in the oil regions of Ohio and Pennsylvania. The Eastern states were not without their troubles, for the report of the Hepburn Committee of the New York legislature in 1879 showed that discrimination between shippers prevailed to an almost incredible degree in every portion of New York state. When the courts, in 1886, decided that the greater portion of the railroad rates could not be treated by state commissions, national control was loudly demanded. Scores of bills were presented to Congress between 1870 and 1886, and, despite much opposition, the Interstate Commerce Act was passed in 1887.

The act laid down some general rules: that rates should be just and reasonable; that railroads should not pool, or agree to divide, their earnings to avoid competition; that they should, under similar conditions, and, unless expressly excused, fix rates in accordance with the long- and short-haul principle (to charge no more for a shorter distance than for a longer one on the same line and in the same direction, the shorter being included within the longer). The act provided for a commission of five men, to be appointed by the

President, which might require uniform accounts from the railroads, and which should enforce the provisions of the act.

§ 17. **Working of the Act.** The commission in its earlier years gave promise of effectiveness, but its powers, as interpreted by the courts, proved inadequate to its assigned task. The railroads in many cases refused to obey its orders, and court decisions paralyzed its activity. Competent authorities declared in 1901, after fourteen years of the commission's operation, that discrimination never had been worse, and a series of exposures of abuses strengthened the popular demand for stricter legislation. The result was first the Elkins' Act of 1903, aimed at discrimination and rebates, and then the Hepburn Act of 1906, which marked a new era in railroad regulation in this country. The commission was increased to seven members, its authority was extended to include express, sleeping car, and other agencies of transportation, and it was given the power to fix maximum rates, not to be suspended by the courts without a hearing. It became thus unquestionably a commission of "the strong type." It began to exercise its new powers with vigor, and the carriers reluctantly accepted its authority. Responsive to a calmer but insistent popular demand further amendments were made by the Mann-Elkins Act of 1910, which strengthened the long-and-short-haul clause, and gave to the commission, among other new powers, that of suspending new rates proposed by carriers. A special Commerce Court of five judges was created with exclusive jurisdiction in certain classes of railroad cases, but this was abolished after a short trial.

It cannot be said that a final satisfactory solution of the railroad problem has been attained; indeed, in most human affairs such a thing is unattainable. But it can be said that there is no considerable sentiment anywhere in favor of reversing the railroad policy that has been developed, as here briefly outlined. Certainly the public has no such sentiment, and the railroads, which for many years opposed the progress of strong federal control, are now foremost in advocacy

of a policy of exclusive national regulation, to remedy the evil of "forty-nine masters."

§ 18. **Public nature of the railroad franchise.** A pretty definite public opinion regarding the nature of the problem has emerged from the nearly half-century of experience and discussion, since the first vigorous agitation of the subject in the seventies of the last century. Railroads in our country are owned by private corporations and are managed by private citizens, not, as in some countries, by public officials. They have been built by private enterprise, in the interest of the investors, not as a charity or as a public benefaction. Railroad-building appears thus at first glance to be a case of free competition where public interests are served in the following of private interests. But, looked at more closely, it may be seen to be in many ways different from the ordinary competitive business. Competition would make the building of railroads a matter of bargain with proprietors along the line, and an obdurate farmer could compel a long detour or could block the whole undertaking. But the public says: a public enterprise is of more importance than the interests of a single farmer. By charter or by franchise the railroad is granted the power of eminent domain, whereby the property of private citizens may be taken from them at an appraised valuation. The manufacturer, enjoying no such privilege, can only by ordinary purchase obtain a site urgently needed for his business. Why may the railway exercise the sovereign power of government as against the private property rights of others? Because the railway is peculiarly "affected with a public interest." The primary object is not to favor the railroads, but to benefit the community. These charters and franchises are granted sparingly in most European countries. In this country they have been granted recklessly, often in general laws, by states keen in their rivalry for railroad extension. When thus great public privileges had been granted without reserve to private corporations, it was realized, too late in many cases, that a

mistake had been made and that an impossible situation had been created.

§ 19. **Other peculiar privileges of railroads.** Further, do the various grants of lands and money to the railroads make them other than mere private enterprises? One answer, that of those financially interested in the railroads, was No. They said that the bargain was a fair one, and was then closed. The public gave because it expected benefit; the corporation fulfilled its agreement by building the road. The terms of the charter, as granted, determined the rights of the public; but no new terms could later be read into it, even tho the public came to see the question in a new light. Similar grants, tho not so large, have been made to other industries. Sugar-factories were given bounties; iron-forges and woolen-mills were favored by tariffs; factories have been given, by competing cities, land and exemption from taxation; yet these enterprises have not on that account, been treated, thereafter, in any exceptional way. So, it was said, the railroad was still merely a private business.

But the social answer is stronger than this. The privileges of railroads are greater in amount and more important in character than those granted to any ordinary private enterprise. The legislatures recognize constantly the peculiar public functions of the railroads. In other private enterprises, investors take all the risk; legislatures and courts recognize the duty of guarding, where possible, the investment of capital in railroads. Laws have been passed in several states to protect the railroads against ticket-scalping. Whenever the question comes before them, the courts maintain the right of the railroads to earn a fair dividend. Private enterprise has been invited to undertake a public work, yet public interests are paramount.

§ 20. **Private and public interests to be harmonized.** If an extremely abstract view is taken there is danger of losing sight of the real problem, which is that of harmonizing these two interests in thought and in public policy. Yet the ex-

treme advocates of the private control of railroads for a long time resented indignantly any public interference with railroad rates and with railroad management as an infringement of individual liberty. Before the passage of the Interstate Commerce Act, in 1887, this position was inconsistently taken by those in whose interests free competition had been violently set aside at the very outset of railroad construction, and for whom governmental interference had made possible great fortunes. It has become generally recognized that the railroads ought not to be allowed to change from a public to a private character just as it suits their convenience. True, they are private enterprises as regards the character of the investment, but they are public enterprises as to their privileges, functions, and obligations.

Finally, it might be said that if there were none of these special reasons for the public control of railways, there is an all-sufficient general reason in the fact that a railroad is always, in some respects and to some degree, a monopoly. Therefore, the railroad problem may be viewed as but one aspect of the general problem of monopoly. To other aspects of this problem we are now to turn our attention.

CHAPTER 28

THE PROBLEM OF INDUSTRIAL MONOPOLY

§ 1. Kinds of monopoly. § 2. Political sources of monopoly. § 3. Natural agents as sources of monopoly. § 4. Capitalistic monopoly; aspects of the problem. § 5. Industrial monopoly and fostering conditions. § 6. Growth of large industry in the nineteenth century. § 7. Methods of forming combinations. § 8. Growth of combinations after 1880. § 9. The great period of trust formation. § 10. Height of the movement toward combinations. § 11. Motive to avoid competition. § 12. Motive to effect economies. § 13. Profits from monopoly and gains of promoters. § 14. Monopoly's power to raise prices.

§ 1. **Kinds of monopoly.** Monopolies may, for special purposes, be classified as selling or buying, producing or trading, lasting or temporary, general or local, monopolies. The terms selling or buying monopoly explain themselves, tho the latter conflicts with the etymology.[1] Under conditions of barter the selling and the buying monopoly would be the same thing in two aspects. A selling monopoly is by far the more common, but a buying monopoly may be connected with it. A large oil-refining corporation that sells most of the product may by various methods succeed in driving out the competitors who would buy the crude oil. It thus becomes practically the only outlet for the oil product, and the owners of the land thus must share their ownership with the buying monopoly by accepting, within certain limits, the price it fixes. The Hudson Bay Company, dealing in furs, had practically this sort of power in North America. Many instances can be found, yet, relatively to the selling monopolies, those of the buying kind are rare.

[1] See Vol. I, p. 76.

A producing monopoly is one controlling the manufacture or the source of supply of an article; a trading monopoly is one controlling the avenues of commerce between the source and the consumers.

Monopolies are lasting or temporary, according to the duration of control. By far the larger number are of the temporary sort, because high prices strongly stimulate efforts to develop other sources of supply. Yet the average profits of a monopoly may be large throughout a succession of periods of high and low prices.

Monopolies are general or local, according to the extent of territory where their power is felt. At its maximum where transportation and other costs most effectually shut out competition, monopoly power shades off to zero on the borderline of competitive territory. The frequent use of the adjectives partial, limited, and virtual are implied but usually superfluous recognitions of the relative character of monopoly.

§ 2. **Political sources of monopoly.** Monopoly gets its power from various sources. A political monopoly derives its power of control from a special grant from the government, forbidding others to engage in that business. The typical political monopoly is that conferred by a crown patent bestowing the exclusive right to carry on a certain business. A second kind is that conferred by a patent for invention, or the copyright on books, the object of which is to stimulate invention, research, and writing by giving the full control and protection of the government to the inventor and the writer or their assignees. In this case the privilege is socially earned by the monopolist; it is not gotten for nothing. Moreover, the patent, being limited in time, expires and becomes a social possession. A third kind is a governmental monopoly for purposes of revenue. In France and Japan the governments control the tobacco trade, and the high price charged for tobacco makes this monopoly yield large revenues. A fourth kind is that derived from franchises for public service corporations, such as those supplying electricity, gas and

water. These franchises are granted to private capitalists to induce them to invest capital in enterprises that are helpful to the community.

§ 3. **Natural agents as sources of monopoly.** "Economic" monopoly, so-called, arises when the ownership of scarce natural agents, as mines, land, water-power, comes under the control of one man or one group of men who agree on a price. Economic monopoly is a result of private property that is undesigned by the government or by society. It is exceptional, considering the whole range of private property, but it is important. The oil-wells embracing the main sources of the world's supply have largely come under one control. One corporation may control so many of the richest iron mines of the country as to be able to fix a price different from that which would result under competition. Coal mines, especially those of some peculiar and limited kind, such as anthracite, appear to become easily an object of monopolization. Economic monopoly merges into political monopolies, such as patents and franchises. Private property is a political institution designed to further social welfare, and only rarely is property in any particular business a monopoly. Private control of great natural resources might have been prevented in many cases had it been foreseen.

§ 4. **Capitalistic monopoly; aspects of the problem.** Capitalistic monopoly, variously called contractual, organized, commercial or industrial monopoly, arises when men unite their wealth to control a market, to overpower or intimidate opposition, and to keep out or limit competition by the mere magnitude of their wealth. These various kinds so merge into each other that they cannot always be distinguished in practice. A patent may help a capitalistic monopoly in getting control of a market; great wealth may enable a company to get control of rare natural resources.

In the discussion of industrial monopoly, the problem now before us, there is a good deal of vagueness and misunderstanding because of lack of definiteness in the use of words

which have rapidly shifted in meaning. The word "trust" originally applied, and still in legal usage applies, to a particular form of organization, that of a board of trustees holding the stock, and thus unifying the control, of two or more formerly separate enterprises. The Standard Oil Company at one time had this form of organization, which was declared by the courts to be illegal (*ultra vires*) for corporations. Now "trust" often is used in the sense of a corporation having monopoly power in some degree; either broadly, of any monopolistic corporation (including railways and local public utilities), or, oftener, limited to manufacturing and commercial monopolies, otherwise called "industrial trusts" in contrast with franchise trusts and railroads.[2] The word "combination" referred originally to a more or less thoro "merger," with a view to attaining monopolistic power, of a number of formerly separate organizations, as in the case of the United States Steel Corporation. But the word is often used as if it were a synonym for trust (in a narrower or wider sense) even as applied to a single enterprise that has grown to be monopolistic. A "trust" in the legal sense of a form of organization, and "combinations" as above defined, might have no monopoly power whatever; whereas a monopoly may be possessed by an individual owner (e.g., of a patent right, railroad, waterworks plant), or by a single corporation that has simply grown monopolistic without the trust form of organization or without combination.

Now it is evident that the real problem is that of monopoly, however attained. Monopoly may be defined as such a degree of control over the supply of goods in a given market that a net gain will result if a portion is withheld.[3] In accord with growing and now dominant usage it is well to observe the following meanings in our discussion. *"Combination"* is a term referring particularly to one method by which

[2] As in the list in sec. 8, below.

[3] See Vol. I, chs. 8 and 31.

monopolies are formed. *"Trust,"* in the now popular sense, is best limited to an industrial, primarily manufacturing, enterprise or group of enterprises, with some degree of monopoly power due not to a "special franchise" giving the use of streets and highways and the right of eminent domain, nor to a single patent, but to a group of favoring technical, financial, and economic conditions. The trust may consist of a single establishment; or of a group of establishments separately operated but united in a "pool" to divide output, territory, or earnings; or of such a group held together by a holding company, or combined into one corporation. Public utility is the name of special franchise enterprises of the kind just mentioned, including, in the broad sense, railroads and local utilities such as street railways, gas, water, and electric light-plants.

§ 5. **Industrial monopoly and fostering conditions.** The problem of monopoly is probably as old as markets. From the first coming together of groups of men to trade there were doubtless efforts made by some individuals and groups of traders to manipulate conditions so as to get higher prices than they could get in a free and open market.[4] There are traces of these practices in ancient times, and the history of the Middle Ages is full of evidences both of monopolistic practices and of the efforts to prevent or control them.

If this fact is borne in mind it may help us to distinguish in thought four features of enterprise that are readily and constantly confused, viz: large individual capital, large production, corporate organization, and monopoly.[5] Evidently

[4] See Vol. I, ch. 8, on competition and monopoly, and ch. 31, on monopoly prices and large production. An understanding of the definitions and of the general principles distinguishing competition and monopoly is a necessary prerequisite to a profitable discussion of the practical problem of monopoly.

[5] See Vol. I, p. 267, on capital; pp. 388–393, on large production. See also references in preceding note on monopoly; and ch. 27, secs. 1 and 2, on corporate organization.

any one of these features may appear without the other; e.g., a person of large aggregate capital may have his investments distributed among a large number of small enterprises, such as farms, without a trace of corporate organization or monopoly, and numerous examples could be given of large production, or of corporate organization, or of monopoly without one or more of the other features.

But the presence of any one of these features is a favoring condition for the development of the others. Hence they are frequently found together, and of late this occurs increasingly. It is difficult to say in every, indeed in any, case which feature has been cause and which effect in this development, but, on the whole, large production seems to have been primary. Itself made possible by inventions, by better transportation, and by the widening of markets, it in turn helped to build up large individual fortunes, and then to create a need for the corporate form of organization. And monopoly power no doubt is more easily gained by large aggregations of capital in a corporation having the advantages of large production.

§ 6. **Growth of large industry in the nineteenth century.** The great recent growth of the monopoly problem is in part to be explained as the result of the growth of large industry, not as the sole cause, but as a favoring condition. Before the middle of the last century a tool-using household industry, on farms and in homes where the greater part of the things used were produced in the family, was still the typical organization in the United States.[6] A family produced somewhat more than it needed of food and cloth and exchanged with its neighbors; so with shoes, candles, soap, and cured meats. The early factories growing out of the household industry were small. Since that time two counter forces have been at work to affect the ratio of manufacturing establishments to population. The number of small establishments has

[6] See above, ch. 26, sec. 3; and ch. 25, secs. 6 and 7.

been increased by the many industries producing the things once made on farms, and by increasing demands for comforts and luxuries. Many establishments producing the staple products that can be transported have been consolidated or have been enlarged, so that the unit of production now averages much larger. The number of cotton-weaving factories was about the same in 1900 as it had been seventy years earlier, while population has grown six fold. Iron- and steel-mills were fewer in 1900 than in 1880. In industries having local markets or local sources of materials, such as grist mills and saw mills, the change in numbers was less, for many small establishments were started in outlying districts at the same time that the mills became larger in the great population centers. But the average number of employees and the average capital per establishment increased in every period between census enumerations.

§ 7. **Methods of forming combinations.** Combinations of previously independent enterprises may be more or less complete and are made by different methods. Four major methods are:

(1) The pool, by which the enterprises continue to be separately operated, but divide the traffic (or output), or the earnings, or the territory, in prearranged proportions.

(2) The trust, in a legal sense (as defined above in section 5).

(3) The holding company, a corporation with the sole purpose of holding the shares of stock, or a controlling number of them, in various corporations otherwise nominally independent.

(4) Consolidation into one company.

At least five minor methods may be distinguished; these are here numbered continuously with the preceding four.

(5) Lease by one company of the plants of one or more other companies.

(6) Ownership of stock by one corporation in another cor-

poration, sufficient to give substantial influence over its policy, if not absolute control.

(7) Ownership of stock in two or more competing companies, by the same individual or group of individuals, to such an extent as appreciably to unify the policies of the competing companies.

(8) Interlocking directorates, that is, boards of competing companies containing one or more of the same persons as directors.

(9) Gentlemen's agreements, mere friendly informal conferences and understandings as to common policies.

§ 8. **Growth of combinations after 1880.** Undoubtedly industry before 1860 had some elements of monopoly. Monopoly constituted part of the banking problem; it began to be evident in the railroads almost at once, and it rapidly increased as street railways and other public utilities were constructed. But after 1880 occurred the formation in larger numbers of industrial enterprises which appeared to exercise some monopoly power. In the years between 1890 and 1900 this movement was still more rapid. Consolidation took place on a great scale in railroads and in manufactures. Much of this has been of such a kind that it does not appear at all in the figures showing the number of establishments and of employees. In the data regarding this movement given by different authorities, many discrepancies appear, as there is no generally accepted rule by which to determine the selection of the companies to be included in the lists. One financial authority gave the following figures[7] regarding the industrial companies reorganized into larger units in the United States between 1860 and 1899, not including combinations in such businesses as banking, shipping, and railroad transportation. Some of the enterprises here included have much and others probably have little or no monopolistic power.

[7] Compiled from data given by "The Journal of Commerce and Commercial Bulletin," reprinted in "The Commercial Year Book," Vol. V, 1900, pp. 564–569.

Decade	*Number Organized*	*Total Nominal Capital*
1860–69	2	$ 13,000,000
1870–79	4	135,000,000
1880–89	18	288,000,000
1890–99	157	3,150,000,000
Total, 40 years	181	$3,586,000,000

§ 9. **The great period of trust formation.** The number of trusts organized and the capital represented by this movement in the last of these decades were seven times as great as in the thirty years preceding. The figures by years for the decade 1890–1899 are as follows:

Decade	*Number Organized*	*Total Nominal Capital*
1890	6	$82,000,000
1891	13	168,000,000
1892	13	140,000,000
1893	5	226,000,000
1894	2	35,000,000
1895	7	104,000,000
1896	3	40,000,000
1897	6	93,000,000
1898	22	574,000,000
1899	80	1,688,000,000
Total, 10 years	157	$3,150,000,000

The influence of great prosperity shows in the large number of combinations; but in 1893, the number was less, altho the total nominal capital (stocks and bonds) was still the greatest it had ever been in any year. Then came the period of depression, 1894–97, when both the numbers and the capital were comparatively small. Then from 1898 to 1901 followed the period of the greatest formation of trusts the world has ever seen.

The list of these four years contains the names of the most widely known American combinations, a few of which are here given with the years of their formation: 1898, American Thread, National Biscuit; 1899, Amalgamated Copper, American Woolen, Royal Baking Powder, Standard Oil of N. J., American Hide and Leather, United Shoe Machinery, American Window Glass; 1900, Crucible Steel, American Bridge;

1901, United States Steel Corporation, Consolidated Tobacco, Eastman Kodak, American Locomotive.

§ 10. **Height of the movement toward combinations.** In a list by another authority [8] it appears that the data for all industrial trusts are in round numbers as follows:

Date	*Number*	*Number of Plants Acquired or Controlled*	*Total Nominal Capital*
Jan. 1, 1904	318	5288	$7,246,000,000

These figures compared with those given above would indicate that the industrial trusts had about doubled in the years 1900–1903 inclusive. Probably most of this growth was in the years 1900 and 1901; then the movement became very slow, because, as is generally believed, of the aroused public opinion, of more vigorous prosecution by the government, and of additional legislation against trusts. The authority last cited gives in a more comprehensive list, in six groups, all the monopolistic combinations in the United States, at the date of January 1, 1904, as follows (the figures just given above being the totals of the first three groups):

Groups	*Number*	*No. of Plants Acquired or Controlled*	*Total Nominal Capital*
1. Greater industrial trusts	7	1528	$2,260,000,000
2. Lesser industrial trusts	298	3426	4,055,000,000
3. Other industrial trusts in process or reorganization or readjustment	13	334	528,000,000
4. Franchise trusts	111	1336	3,735,000,000
5. Great steam railroad groups	6	790	9,017,000,000
6. Allied independent railroad groups	10	250	380,000,000
Total,	445	8664	$20,000,000,000

§ 11. **Motive to avoid competition.** This remarkable movement toward the formation of united corporations from

[8] John Moody, "The Truth About the Trusts," 1904

formerly independent enterprises called forth a variety of explanations. The organizers of trusts gave as the first explanation of their action that it was the necessary result of excessive competition. It is not to be denied that a hard fight and lower prices often preceded the formation of the trusts. But as this excessive competition usually is begun for the very purpose of forcing others into a combination, this explanation is a begging of the question. It is fallacious also in that it ignores the marginal principle in the problem of profits. Profits are never the same in all factories, and to those manufacturers that are on the margin competition may appear excessive. It generally has been the largest and strongest factories, in the more favored situations, that, in order to get rid of troublesome competitors, have forced the smaller, weaker, industries to come into the trust. In other cases the smaller enterprises have been eager to be taken in at a good price, altho they might have continued to operate independently with moderate profits. When, therefore, it is said that competition is destructive, it may be a partial truth, but more likely it is a pleasantry reflecting the happy humor of the prosperous promoters of the combination.

§ 12. **Motive to effect economies.** Another advantage of the combination of competing plants that was strongly emphasized was the economy of large production.[9] The economies that are possible within a single factory may be still greater in a number of combined or federated industries. The cost of management, amount of stock carried, advertising, cost of selling the product, may all be smaller per unit of product. Each independent factory must send its drummers into every part of the country to seek business. In combination they can divide the territory, visit every merchant and get larger orders at smaller cost. A large aggregation can control credit better and escape losses from bad debts. By regulating and equalizing the output in the different localities, it can run more nearly full time. Being acquainted with the

[9] See Vol. I, pp. 388–393.

entire situation, it can reduce the friction. A combination has advantages in shipment. It can have a clearing-house for orders and ship from the nearest source of supply. The least efficient factories can be first closed when demand falls off. Factories can be specialized to produce that for which each is best fitted. The magnitude of the industry and its presence in different localities often, in the period of trust formation, served to strengthen its influence with the railroads, and to increase its political as well as its economic power.

Another phase of corporate growth is the "integration of industry," that is, the grouping under one control of a whole series of industries. One company may carry the iron ore through all the processes from the mine to the finished product. A railroad line across the continent owns its own steamers for shipping goods to Asia or Europe. Large wholesale houses own or control the output of entire factories.

§ 13. **Profits from monopoly and gains of promoters.** There are, however, well-recognized limitations to the economy of large production in the single establishment,[10] and of late there has been ever-increasing skepticism as to the net economy actually attributable to combinations. Undoubtedly the merging of a number of old plants has sometimes effected an immediate improvement in the weaker ones. A new broom sweeps clean. This movement chanced to be contemporaneous with the development of "efficiency engineering," and of "scientific cost-accounting," and these better methods, already developed and applied in comparatively small plants, could be more quickly extended to the other plants brought into the combination. Moreover, the personal organizations in the separate enterprises had been brought to a high state of efficiency by the stimulus of competition, and there is reason to fear that, after some years of centralized bureaucratic organization, much of this efficiency may be lost.

There seems no doubt that the strong motive for forming

[10] See Vol. I, pp. 391–392.

combinations is the profit to the organizers.[11] Whatever was the more generous motive or more fundamental economic reason assigned by the promoters, the investing public confidently expected that higher prices would be the chief result. There are indirect as well as direct gains to the promoters of a combination. There is the gain from the production and sale of goods to consumers, and there is the gain from the financial management, from the rise and fall in the value of stock. The promoters of a combination often expect to make from sales to the investing public far more than from sales to the consumer of the product. A season of prosperity and confidence, when trusts and their enormous profits are constantly discussed, has an effect on the public mind like that of the gold discoveries in California and in the Klondike. Then is the time for the promoter to offer shares without limit to investors.

§ 14. **Monopoly's power to raise prices.** There is no doubt that the formation of a combination from competing plants can and does give a control over prices, a monopoly power, not possessed by the separate competing establishments. The same kind of power might be attained by the growth of one establishment outstripping all its competitors, or by a new enterprise coming into the field backed by powerful capitalists. But this would work slower and less extensive results than does the formation of a combination.

Of course, the fundamental principles of price cannot be changed by a trust; a selling monopoly can affect price only as it affects supply or demand.[12] The strongest trust yet seen has not been omnipotent. Many careless expressions on the subject are heard even from ordinarily careful writers and speakers: "The trust can fix its own prices," "has unlimited control," "can determine what it will pay and for what it will sell." This implies that trusts are benevolent, seeing that the prices they charge are usually not far in excess

[11] See Vol. I, p. 334, on the function of the promoter.

[12] See Vol. I, pp. 80–85, 382–387, 394–396.

of competitive prices in the past. Such a view overlooks the forces that limit the price a monopoly can charge. If the supply remains the same, no trust can make the price go higher. The monopoly usually directs its efforts to affecting the supply, leaving the price to adjust itself. It can affect the supply either by lessening its own output or by intimidating and forcing out its competitors. It is true that this logical order is not always the order of events. The trust may not first limit the supply, and then wait for prices to adjust themselves; it may first raise its prices, but unless it is prepared to limit the supply in accordance with the new resulting conditions of demand, such action would be vain. The control of the sources of supply is the logical explanation of the higher price, even tho the limitation of supply is effected later by successive acts found necessary to maintain the higher price.

The report of the Federal Industrial Commission, which, from 1898 to 1901, investigated the trusts, showed that immediately upon their formation, the industrial combinations had raised their prices.[13] Prices might be lowered again but only when and where competition became troublesome, thus causing either "price-wars" or discrimination.

[13] A summary of this evidence is given in the author's "Principles of Economics" (1904), pp. 327–330. A fuller outline of the results of the Commission's conclusions may be found in "The Trust Problem," by J. W. Jenks, who acted as expert in the investigation.

CHAPTER 29

PUBLIC POLICY IN RESPECT TO MONOPOLY

§ 1. Moral judgments of competition and monopoly. § 2. Public character of private trade. § 3. Evil economic effects of monopolistic price. § 4. Common law on restraint of trade. § 5. Growing disapproval of combination. § 6. Competition sometimes favored regardless of results. § 7. Increasing regard for results of competition. § 8. Common law remedy for monopoly ineffective. § 9. First federal legislation against monopoly. § 10. Policy of the Sherman anti-trust law. § 11. Policy of monopoly-accepted-and-regulated. § 12. Field of its application. § 13. Industrial trusts,—a natural evolution? § 14. Artificial versus natural growth. § 15. Kinds of unfair practices. § 16. Growing conception of fair competition. § 17. The trust issues in 1912. § 18. Anti-trust legislation in 1914.

§ 1. **Moral judgments of competition and monopoly.** What should be the attitude of society toward monopoly? Is it good or bad as compared with competition? Some very strong ethical judgments bearing on practical problems are found in the popular mind connected with the ideas of competition and monopoly. Competition usually is pronounced bad when viewed from the standpoint of the competitors who are losing by it, and as good when viewed from the standpoint of the traders on the other side of the market who gain by that competition. Competition among buyers thus appears to sellers to be a good thing; that among sellers appears to themselves to be a bad thing (and *vice versa*). Many persons are moved by sympathy to pronounce competition among low-paid and underfed workers to be bad, and each worker is convinced that it is so in his own trade. Yet nearly all men are of one mind that competition is a good thing in most

industries, those that are thought of as supplying "the general public." Monopoly is believed by the public to be wrong in such cases, and competition to be the normal and right condition of trade. Yet there are some men interested in "large business" who look upon competition as bad, and upon monopoly as having essentially the nature of friendly co-operation. The roots of these opinions, or prejudices, are easily discoverable in the theoretical study of the nature of monopoly.[1] Yet often different men or groups of men feel so strongly on this matter, viewing it from their own standpoints, that they are quite unable to understand how any one else can feel otherwise. There is thus a great deal of controversy to no purpose.

§ 2. **Public character of private trade.** Any such general judgment as that of the public, tho it may be mistaken in some details, is likely to be a resultant of broad experience. There is in competitive trade a public, a social character, which monopoly destroys. Even in a simple auction, when the bidding is really competitive, price depends far less on shrewd bargaining, on bluff, or on stubbornness, than is the case in isolated trade. Each bidder is compelled by self-interest to outbid his less eager competitors, and thus the limits within which the price must fall are narrowly fixed. The auction-sale is less a purely personal matter, takes on a more public aspect, has a more socialized character than isolated trade, depends more on forces outside the control of any one man, and results in a price fixed with greater definiteness. The price in a more developed market results from the play of impersonal forces, or at least from the play of personal forces which have come under the rules of the market.[2] This price men are ready to accept as fair. It has a democratic character, whereas the gains of monopoly price arouse resentment as being the work of personal, and felt to be despotic, power. Monopoly price is a bad price to the one who pays

[1] See Vol. I, especially pp. 74 and 75.

[2] See Vol. I, pp. 59, 68, 70–71.

it, not only because it is a high price but because it bears the character of personal extortion.

The medieval notion of *justum pretium,* the just price, may have been often misapplied, and it was often criticized and ridiculed by economists in the period of idealized competition (from Adam Smith to John Stuart Mill). But at the heart of the notion was the judgment that general uniform prices fixed in the open market are the proper norms for prices when one of the traders is caught at an exceptional disadvantage. The modern world has been compelled to reëxamine the conception of the just price.

§ 3. **Evil economic effects of monopolistic price.** Theoretical analysis confirms this view. Any exercise of monopolistic power over price keeps some, the weaker bidders, from getting any of the desired goods, or limits them to their most urgently desired units. What may be called "the theoretically correct price"[3] with two-sided competition is the one that permits the maximum number of trades with a margin of gain to each trader. In narrowing the possibility of substitution of goods by trade, the sum of values of goods for most men is diminished. All citizens thus that are the victims of an artificially created scarcity look upon monopoly as "bad," just as they do upon the evils of nature—drought, locusts, fires, and pestilence. A monopoly has an indirect and more distant effect upon the spirit of all those trading with it. If they are producers selling at prices depressed by monopoly, their money incomes are reduced; if they are consumers buying at monopoly prices, their real-incomes are reduced; in either case their psychic incomes, the motives of all industry, are diminished, and their industrial energies are relaxed.

§ 4. **Common law on restraint of trade.** The first recorded case in English law, wherein the courts sought to prevent the limiting of competition by agreement, runs back to the year 1415, in the reign of Henry V. This was a very

[3] See Vol. I, pp. 66, 67.

simple case of a contract in restraint of trade, whereby a dyer agreed not to practise his craft within the town for half a year. The court declared the contract illegal (and hence unenforceable in a court) and administered a severe reproof to the craftsman who made it. Thus was set forth the doctrine of the moral and legal obligation of each economic agent to compete fully, freely, and without restraint upon his action, even restraint imposed upon himself by a contract voluntarily entered into for his own advantage.

Not until the eighteenth century was this rigid doctrine somewhat relaxed so as to permit the sale of the "good will" of a business under limited conditions, and some "reasonable" contracts in restraint of trade. Later the emphasis was somewhat further shifted, by judicial interpretations, from the notion of free competition to that of "fair" competition, so as to permit contracts involving moderate restraint of trade, if the essential element of competition was retained. Thus it was said that a piano manufacturer might by contract grant an exclusive agency to a dealer in a certain territory, there being many other competing makes of pianos, and such a contract "does not operate to suppress competition nor to regulate the production or sale of any commodity."[4] But with such moderate limitations the courts in cases under the common law have steadily disapproved contracts in restraint of trade that would appear to be to the disadvantage of third parties, whether producers or consumers.

§ 5. **Growing disapproval of combination.** The attitude of the courts became in one respect stricter. Some earlier cases involved the doctrine that what is lawful for an individual to do alone is lawful if done in combination with others. Indeed, a comparatively recent case[5] declared regarding a group of dealers, agreeing not to deal with another, that

[4] 77 Miss., 476. Cited by Bruce Wyman, "Control of the Market," p. 137.

[5] 19 R. I., 255.

"desire to free themselves from competition was a sufficient excuse" for such action. But the general trend has been to the doctrine that a combination of men "has hurtful powers and influences not possessed by the individual." Hence threats of associations of traders (retailers or wholesalers) not to deal with another if he continued to deal with some third party have been declared acts in restraint of trade.[6] Yet in the case cited the court seemed to have been more concerned with protecting "the individual against encroachment upon his rights by a greater power," "one of the most sacred duties of the courts," than with rights and interests of the general public, endangered by such restraint of trade.

§ 6. **Competition sometimes favored regardless of results.** In another respect the courts have wavered in their attitude toward competition, the general doctrine being that competition, particularly the cutting of prices, is absolutely justifiable, regardless of circumstances. In the leading English case[7] the facts were that the larger steamship companies sent to Hankow additional ships, now called, figuratively, "fighting ships," to "smash" freights in order to ruin tramp steamship owners and drive them out of the field. The court held that this constituted no legal wrong to the tramp steamship owners, and scouted the idea of the court's looking at the motives in price cutting, or taking into consideration in any way what the court called "some imaginary normal standard of freights and prices." And of this case the lawyer is forced to say: "Undoubtedly the excellent opinion just quoted represents the law everywhere," even tho there are other cases difficult to harmonize with it.[8]

[6] 115 Ga., 429.

[7] Mogul Steamship Company v. McGregor (L. R. 23 Q. B. D. 598).

[8] Bruce Wyman, "Control of the Market," p. 22. In 1914 (216 Fed. 971), a federal court granted an injunction restraining the use of fighting ships by a combination, and in 1915 (220 Fed. 235), the court indicated a willingness to grant a similar injunction if necessary. Similarly "fighting brands" of goods have been recently prohibited.

To the economist, not bound in like manner by legal precedent, such a verdict was from the first impossible. The court appears to have considered that only the rights of the private litigants, the tramp steamship owners, were involved, not the rights and interests of the shipping public; it considered the immediate and not the ultimate effects of the "smashing" of rates; it allowed itself to be deceived by the appearance of acts that in outer form were competition, but that had as their purpose the strengthening and maintenance of monopoly. These acts are forms of the "unfair" practices that will be mentioned later.[9]

§ 7. **Increasing regard for results of competition.** Despite the binding precedents, the courts in some later decisions have refused to look upon competition as good regardless of its motives and of its consequences. In a federal case[10] the judge, in a brief and acute dictum, recognized the evil of a rate war that would result from threats of definite cuts. They impair "the usefulness of the railroads themselves, and cause great public and private loss." The court's opinion was no doubt largely influenced by the fact that railroad rates were already subject to regulation: "Every precaution has been taken by state legislatures and by the congress to keep them just and reasonable,—just and reasonable for the public and for the carriers."

In a state case[11] the facts were that a man of wealth started a barber shop and employed a barber to injure the plaintiff and drive him out of business. The court recognized that while, as a general proposition, "competition in trade and business is desirable," it may in certain cases result in "grievous and manifold wrongs to individuals"; and in this case the "malevolent" man of wealth was declared to be "guilty of a wanton wrong and an actionable tort." The

[9] See below, sec. 15.

[10] Averrill v. Southern Railway (75 Fed. Rep. 736).

[11] 107 Minn. 145.

economists can but pronounce this judgment admirable so far as it goes, but it is remarkably confined to a consideration of the private legal rights of the injured competitor, and gives hardly a hint of a higher criterion for judging competitive acts, that of the general welfare.

§ 8. **Common law remedy for monopoly ineffective.** The common law contained prohibitions enough, both broad and specific, against contracts and acts in restraint of trade. The common law contained likewise a closely related body of doctrine by which the railroads, as common carriers, ought to have given equitable and undiscriminating rates to all shippers. There was a strong body of influential opinion that long maintained that the case was sufficiently covered, that the only thing needed was to enforce the common law. Even now, after all that has elapsed, there are some in railroad and business circles who still appear to hold that opinion. But the evils of railroad discrimination and of other monopolistic practices continued, and for some cause the common law was not enforced, excepting occasionally, disconnectedly, and without important results.

Why? The answer may be ventured that in the common law the whole question of restraint of trade was treated primarily as one of private rights and only incidentally as one involving general public policy. Cases came before the courts only on complaint of some individual that felt injured. Now the injury of higher prices due to contracts in restraint of trade is usually diffused among many customers, and the loss of any one is less than the expense of bringing suit. Consequently, it rarely happened that cases were brought before the courts except by one of the two equally guilty parties to a contract in restraint of trade, when the other party had failed in some way to do his part. When such an illegal contract in restraint of trade was proved before a court by a defendant in a civil suit the contract was declared unenforceable, and the only penalty in practice was that the plaintiff

could not collect his debt or secure performance from the defendant.[12] A very similar situation existed in the case of the individual's grievances against railroad charges and services.

§ 9. **Federal legislation against monopoly.** The passage of the Interstate Commerce Act in 1887 [13] prohibiting discrimination and railway pooling, and that of the Act of 1890 "to protect trade and commerce against unlawful restraints and monopolies," popularly known as the "Sherman Anti-trust Law," were part of one public movement to remedy monopoly. From one point of view it seems true, as has often been said, that in essence these statutes were simply enactments of long established principles of the common law. Section 1 of the Sherman law declared illegal "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several states, or with foreign nations." Section 2 made it a misdemeanor "to monopolize, or attempt to monopolize."

But from another point of view, these new laws showed a marked change both in the conception of the interests involved and in the means of preventing the evils. The evil was at last conceived of as a general public evil; the laws are not merely to protect individuals,[14] but "to regulate commerce," "to protect trade and commerce." More important still, it was made the duty of public officers (district-attorneys of the United States) to institute proceedings in equity "to prevent and restrain" violation of the Sherman Act, and a special Commission was instituted to deal with railroad cases. It was this undertaking of the initiative by the government, the treatment of the problem as one of the general welfare, that marked a new epoch in this field. The methods and

[12] Arnott v. Pittston and Elmira Coal Co., 68 N. Y. 558 (1877).

[13] See ch. 27, sec. 16.

[14] At the same time the rights of injured individuals are better safeguarded by sec. 7 of the Sherman law, permitting the recovery of threefold damages and attorney's fees.

agencies provided might be at first inadequate and ineffective, but time and experience could remedy those defects.

§ 10. **Policy of the Sherman anti-trust law.** But in important respects opinion and policies were not yet clear and consistent. They wavered from one to another conception of the method for dealing with the problem. It was clear only that *laissez-faire* had been laid aside. There are three other possible policies reflecting as many different conceptions of the problem of monopoly: (1) monopoly-prosecuted, (2) monopoly-accepted-and-regulated, (3) competition-maintained-and-regulated. The policy of monopoly-prosecuted is merely negative. This is the policy of the Sherman law. It opposed no positive action to the making of monopolistic contracts and to the formation of combinations, but declared them to be illegal and provided for their prosecution and punishment after the mischief had been done. The great epoch of the formation of combinations [15] followed the enactment of this law. True, lack of experience by the department of justice, and lack of vigorous effort to enforce the law, and the slow action of the courts were largely to blame for this result. The law has proved to be more effective to prevent new combinations since it has been successfully enforced in a few notable cases. But once large combinations have been formed and complex individual financial interests have become involved, the courts have proved to be incapable of undoing the deeds. In practice the most sweeping remedy attempted under the law has been the dissolution of enormous combinations formed years after the law went into effect. This has been called the job of unscrambling the eggs. The most notable cases were those of the Standard Oil Company and of the Tobacco Company, decided in 1911, the results being absurdly futile.

§ 11. **Policy of monopoly-accepted-and-regulated.** A second policy may be called that of monopoly-accepted-and-regulated. This is represented by the Interstate Commerce Act

[15] See ch. 28, sec. 9.

(at first weakly, and more vigorously after its amendment), and by the great mass of state legislation putting the local and interurban public utilities under the control of regulative commissions. For some decades after these industries developed, the public faith was in competition as the effective regulator. If monopolistic prices were too high, another company was chartered to build a parallel railroad or another horse-car line on the next street, or to lay down another set of gas pipes in the same block. Almost from the first some students of the subject saw the wastefulness and futility of this kind of competition, and nearly a half century later the public reluctantly came to this view. Still, sad to relate, the same history had to be repeated in regard to the telegraph and telephone industry, and in some quarters the ultimate outcome is not yet recognized. The Interstate Commerce Act itself, with odd inconsistency, contains an anti-pooling provision (section 5) the purpose of which seems to have been to compel competition as to rates which is now practically impossible under the other provisions of the law. The policy of "monopoly-accepted" was seen to involve as a necessary feature, public regulation of rates, to the point, if necessary, of absolutely fixing them. The principle has come to be accepted that wherever competition ends there public regulation of prices and service begins. Monopolistic enterprises are *ipso facto* quasi-public institutions.

§ 12. **Field of its application.** This policy, gradually extending in practice, came to be applied to the class of industries which, for lack of a better name, are called local utilities. The one characteristic that they all have in common is that the service, or product, which is sold requires for its delivery an expensive, permanent, physical plant, and some special use of public highways. Thus gas pipes, water pipes, poles and wires for telegraph, telephones and electric light, street railways, regular steam railroads and some other minor industries all answer to this test.[16]

[16] See further, ch. 30, secs. 5–9.

Beginning about the year 1900 one state after another enlarged the powers of its state railroad commission or created a new corporation commission to regulate these "local" or "public utilities."[17] They have accomplished much, but the development of this kind of regulation has not proceeded in many cases beyond the adjustment of relative rates and the abolition of discrimination among the different individuals and classes of customers. Experience has shown the great difficulty of determining what is a fair absolute level of charges. A new science of accounting has been developing to assist in the solution of a problem, the complexity of which transcends the agencies at hand to deal with it. With this policy applied to the local utility (and railroad) phase of monopoly, there remains still the problem of the industrial trusts in the manufacturing enterprises.

§ 13. **The industrial trust,—a natural evolution?** The policy that one is inclined to favor regarding industrial trusts depends very much on one's answer to the question: Are or are not industrial trusts natural growths? In this bare form the question is somewhat vague, but the thought of those who answer it in the affirmative is positive if not always entirely clear. They (at least the extreme representatives of this view) declare that trusts have been, are, and will continue to be, the results of a "natural evolution" of business conditions, as inevitable as the great changes in the physical world. If this is so man and society must recognize the facts, must waste no efforts vainly in fighting against fate, but should accept the trusts and realize their possibilities for good. And these are declared to be great, for it is assumed that without the trusts all of the economies of large production must be sacrificed. Irresistible economic forces, it is said, are creating larger and larger units of business; friendly coöperation and unified action must take the place of competition in business.

The outcome must be monopoly in every important line of

[17] See ch. 27, sec. 15, on state commissions.

manufacturing industry and perhaps of commerce. In view of public opinion toward monopoly, its acceptance necessitates its regulation. This argument is supported by appeal to the experience in the field of railroads and other local utilities, where public opinion has, after long hesitation, recognized competition to be impracticable and the acceptance of monopoly as inevitable. As extremes often meet, the view of the industrial trust as a natural evolution is most favored on the one hand by men of "big business," already interested financially in trusts, and on the other hand by the most radical communists (or socialists) whose ideal is the complete monopolization of industry under the government.

§ 14. **Artificial versus natural growth.** Opposed to this view is a deep and widespread popular opinion or prejudice, against the trust and in favor of competition. General opinion in this case (as not always) finds much support in special economic studies of the methods by which the existing industrial trusts came into being. First the question properly is raised; just what is meant by "natural"? In a sense everything has been the natural outcome of evolution,—the steam engine, the submarine, the boycott, militarism. In an equally good, if not better sense, every mechanical invention and every method of industrial organization is artificial, has been the result of man's choice and effort. In any case men may choose as good or reject as unsuitable or bad, any particular mechanical device, and society may decide to adopt any particular policy toward a certain form of business organization and certain business practices (unless, indeed, our philosophy be that of automatism, crude determination or fatalism, regarding all human affairs).

Now when one examines the methods which the notable trusts actually did employ, and apparently had to employ, even when they were already powerful single enterprises, in order to destroy their competitors and to attain their monopolistic power, the word "natural" seems hardly to describe the process. The evidence is not a matter of hearsay but is

embodied in a long line of judicial decisions, and in numerous special inquiries by governmental commissions and officials.[18]

§ 15. **Kinds of unfair practices.** This evidence is a startling array of "unfair practices" and "unfair" forms of competition, which, however novel in appearance, are essentially of the kind that has been illegal under the common law for the past five hundred years. Many of these practices were baldly dishonest, many of them were contemptibly mean. The manifold varieties of unfair competition may be roughly grouped under three headings according as they are connected with (1) Illegal favors received from public or quasi-public officials; (2) Discrimination against, or control of, customers; (3) Foul tactics against competitors.

(1) Among the practices in the first group are discriminatory rates and rebates from railroads, favoritism in matters of taxation, undue influence in legislatures, special manipulation of tariff rates through powerful lobbies, or paid agents, undue influence in the courts through the employment of lawyers of the highest talent, who often later became judges.

(2) Among the unfair practices toward customers are discriminations among them by the various forms of price cutting, grants of credit, and kinds of service. The liberty of retail dealers is limited in a variety of ways, such as fixing resale prices, requirement of exclusive dealing, and full-line forcing.

(3) All the methods just mentioned as employed in dealings with customers are likewise unfair toward competitors. Many other methods are used to the same end, such as: enticing away their employees, or corrupting and bribing them

[18] A few among the most important sources are the Report of the Industrial Commission, 1898–1901, 19 volumes; reports of the Bureau of Corporations on the petroleum and tobacco industries; U. S. Supreme Court decisions, e.g., the Addystone Pipe case (175 U. S. 211), given in Ripley, Trusts, Pools, and Corporations, p. 86; the Standard Oil case (221 U. S. 1), and the Tobacco Trust case (221 U. S. 106); and the very comprehensive volume on "Trust Laws and Unfair Competition," by Joseph E. Davies, Commissioner of Corporations, Washington, 1916.

to act as spies, paying secret commissions, false advertising, misrepresenting competitors, imitating their patterns in goods of defective workmanship, shutting off their credit or their supplies of materials, acquiring stock in competing companies, malicious suits, infringement of patents, intimidation by threats of business injury or of scandalous exposures, operation of bogus independent companies.

§ 16. **Growing conception of fair competition.** Any industrial trust that was able to gain domination and monopoly power only by the use of such practices, or any part of them, can hardly be deemed the result of a "natural evolution." If "artificial" means the use of artifices surely this development deserves the adjective. Yet even if not natural, this development may be thought to be "inevitable," human nature being as it is. But the bald fact is that while the great trust movement was in progress no effort worthy of the name was being made to enforce even the then existing laws and to oppose this artificial development. The same allegation of inevitableness was once commonly made of discriminatory railroad rates and rebates, evils which have been in large part remedied only since the period 1903–1906, when at last intelligent action was taken.

To those that came to see the problem in this light, acceptance of industrial monopoly with its complex task of fixing by public commission the prices on innumerable kinds and qualities of goods seemed at least premature. Rather, the first step toward a solution seemed to be the vigorous prevention of unfair practices, and the next step a positive regularizing of "fair competition."[19] The fundamental idea in this is the enforcement of a common market price (plus freights) at any one time to all the customers of an enterprise. By this plan potential competition would become actual, and small enterprises that were efficient might compete success-

[19] John B. Clark, the distinguished professor of economics in Columbia University, has been the foremost and clearest exponent of this idea, in his "The Control of Trusts," 1901, 2d ed., 1912, and in other works.

fully within their own fields with large enterprises that maintained prices above a true competitive level. Even general lowering of prices by a large enterprise with evident purpose of killing off smaller competitors is unfair competition under this conception. It was for years recognized that the realization of this policy required legislation regarding uniform prices and the creation of a commission for the administration of the law.

§ 17. **The trust issues in 1912.** The campaign of 1912 presented in an interesting manner the three policies above outlined. The Republican party led by President Taft stood for the policy of monopoly-prosecuted; its program was the vigorous enforcement of the Sherman law. The Progressive party, led by Mr. Roosevelt, stood in the main for the policy of "monopoly-accepted-and-regulated"; its program called for minimizing prosecution and for developing a system of regulation of trust-prices. The Democratic party, led by Mr. Wilson, stood for the policy of competition-maintained-and-regulated, and the problem was to find means to strengthen and regularize the forces of competition.

In practice these programs doubtless would be less divergent than they appear. All alike proposed the retention of the Sherman law. The two proposals to go further were presented as mutually exclusive alternatives, whereas they necessarily must supplement each other in some degree. The Progressives did not expect all industries to become monopolies, and the Democrats tacitly conceded to monopoly-accepted the large field of transportation and local utilities it already had occupied. But there was a real difference in the angle of approach and a real difference in emphasis. The Democratic program (tho somewhat unclearly) showed greater distrust of monopoly and greater faith in the possibilities of creating fair conditions of competition (which never had fully prevailed) in which efficiency would be able to prove its merits and monopoly would work its own undoing. It was the more logical for the country to give this policy at least a trial

before adopting irrevocably the policy of general industrial monopoly. In either case competition actual or potential is the fundamental principle by which prices have to be regulated. Where competition is enforced it is by applying some general rules that create a general market price instead of discriminatory prices, but the fixing of the price is left to the competitors. Where monopoly is accepted prices must be fixed with reference to an estimated competitive standard, that which under hypothetically free conditions would just suffice to attract and retain private enterprise and capital.

§ 18. **Anti-trust legislation of 1914.** The anti-trust legislation of 1914, passed by the Democratic party to carry out its program, is embodied in two acts: the Clayton Act, laying down new rules; and the Federal Trade Commission Act, mainly to provide an agency with administrative and quasi-judicial functions to deal with unfair practices. This displaced the Bureau of Corporations, established in 1903. The Clayton Act forbids discrimination where the effect may be to lessen competition, or tend to create a monopoly. Due allowance may be made for difference in the cost of selling or transportation, but a difference is not required in such cases. It forbids contracts to prevent dealers from handling other brands. It forbids corporate ownership of stock in a competing corporation, forbids interlocking directorates in large banks and in other competing corporations, with capital, surplus and undivided profits aggregating more than $1,000,000. The Trade Commission Act in addition to its administrative provisions for investigation, reports, and readjustment of the business of companies upon request of the courts, declares that "unfair methods of competition in commerce" are unlawful, and both empowers and directs the Commission to prevent their use (banks and common carriers subject to other acts being excepted).

These acts are too new to have been given a fair test. They have, however, given evidence of exercising at once an influ-

ence upon the situation. They are imperfect in some details that will require amendment; but they mark the beginning of a new policy toward industrial monopoly, the results of which will be watched with the deepest interest.

CHAPTER 30

PUBLIC OWNERSHIP

§ 1. Waves of opinion as to public ownership. § 2. Primary functions of government favoring public ownership. § 3. Economic influences favoring public ownership. § 4. Forms of municipal ownership. § 5. Localized production favoring monopoly. § 6. Economies of large production favoring monopoly. § 7. Uniformity of products favoring monopoly. § 8. Franchises favoring monopoly. § 9. Various policies toward local public service industries. § 10. State ownership of various kinds. § 11. National ownership. § 12. Economic basis of public ownership.

§ 1. **Waves of opinion as to public ownership.** Opinion and practice in the matter of the public ownership of wealth and the direct management of enterprises has moved in waves. In feudal times, when government was practically identical with the personal ruler, and the private "domains" of the lord or king were the sole source of his public revenues,[1] holdings of this kind were very large. Their public nature came to be more fully recognized, but they did not yield large revenues, and gradually were in large part sold or given away to private owners. This was particularly true in England, and in a less degree on the continent of Europe. The conviction grew that the state, or government, was an inefficient enterpriser, and that the sound public policy was to foster private industry and obtain public revenues by taxation. The ideal was embodied in the *laissez-faire* philosophy that government should confine itself exclusively to the most essential political functions, leaving the economic functions absolutely alone. It should keep the peace, prevent men from beating and robbing each other, and preserve the personal

[1] See above, ch. 16, sec. 5.

liberty of the citizen.[2] Thus, it was believed, all of the economic needs would be provided for by competition, in the best way humanly possible, in the quantities and at the rate needed. This policy attained its maximum influence in the first half of the nineteenth century in England, and in America probably just before the Civil War, in the decade of the fifties.

§ 2. **Primary functions of government favoring public ownership.** Some public ownership, however, is necessary for the exercise even of the primary political functions of the state. Civilized government requires the use of numerous material agents. Buildings for legislative and executive offices, custom-houses, post-offices, lighthouses, can be rented of private citizens, as post-offices usually are in small places; but it is obviously economical and convenient in large cities for the government to own the public buildings. Government can reduce to a minimum its direct employment of officials by "farming out" the taxes, as all countries once did to some extent, and as France continued to do up to the French Revolution. It is now the general policy for government to own or control its essential agencies, but this does not involve in every case the employment of day-labor direct as in cleaning the streets or collecting garbage. The more simple political functions shade off into the economic. To coinage usually are added the issue of legal-tender notes and certain banking functions; the post carries packages, transmits money, and in most countries now performs the function of a savings-bank for small amounts. The social and industrial functions undertaken by public agencies have steadily increased since the middle of the nineteenth century, and the sphere of the state has been enlarging.[3] The question ever open is as to the proper limits to this development.

§ 3. **Economic influences favoring public ownership.** In some cases private ownership is difficult because of the excessive cost of collecting for the service. The cost of main-

[2] See above, ch. 16, sec. 2, on the police function.

[3] See ch. 16, secs. 3 and 4.

taining toll houses on a turnpike sometimes exceeds the amount collected. Collection in other cases, as for the service of lighthouses to passing ships, is impossible. Public industry may secure, through the economy of large production, a cheaper and more efficient service, the benefits and costs being diffused throughout the community. The benefits of the work of experiment-stations for agriculture are felt immediately by the farmers, but are diffused to all citizens. A manufacturer able to keep his method secret, or to retain his advantages for a time, can afford to undertake experiments in his factory, but the farmer seldom can. The public ownership of parks for the use of all gives a maximum of economy in the production of the most essential goods,—fresh air, sunshine, natural beauty, and playgrounds in the midst of crowded populations. Municipal ownership of waterworks is an extension of the same idea. Not only because large amounts of water are used by the public, but because cheap, pure, abundant water is an essential condition to good citizenship, speculation should in every possible way be eliminated from this industry.

The assumption is made in the *laissez-faire* doctrine that the interest of the public harmonizes with that of the individual. But this proves often not to be the case. For example, the forest has an immediate value to its owners and to the consumers of lumber, and it has also a diffused utility in its influence on industry, on climate, on navigation, on water-power and on floods. Yet, as the private owner, unless a great land monopolist, does not control enough of the forest to appreciably affect any of these things, and could rarely sell them even if he could affect them, he will cut down the tree whenever he can gain by doing so. In this situation either governmental control or governmental ownership of forests is essential.

Each kind of political unit, or subdivision of government, develops characteristic kinds of public ownership and industry. Federal states consist of three main groups of political

units: national, provincial, and local. Provincial units are the largest subdivisions, as the American "states," or commonwealths, the German states, and the provinces in other countries. The term local political unit is more complex and may mean county, township, village, city, or school or sanitary district; but most of what is to be said of local ownership refers to cities or to incorporated villages.

§ 4. **Forms of municipal ownership.** Local political units acquire ownership only in local industries and in wealth used locally by the citizens. Nearly all parks and recreation grounds are owned by cities. As population has become more dense, private yards of any extent have become impossible, in cities, for all but the wealthy. Public ownership of parks insures a "breathing place" and recreation grounds to the common man in the most economical way. Of late the movement for large and small public parks and playgrounds has gone on rapidly in American cities. Related to parks are public baths, public libraries, art collections, museums, zoological gardens, etc. Some have seen danger in this policy, but the public sees no such danger so long as the things supplied gratify the higher tastes—as art, music, literature, and social recreation. These give no encouragement to the increase of improvident families and to the breaking down of independent character. The means of local communication —streets, roads, bridges—were once owned largely by private citizens. Here and there still are found toll roads and toll bridges built under charters granted a century ago, but tolls on public thoroughfares are for the most part abolished. A public market, where the producer from the farm and the city consumer can meet, is an old institution. About two thirds of the cities of 30,000 population or more have public markets or scales, and fully one third have public markets of importance. New York City has six large retail and wholesale markets, for selling meat and farm produce, in which rents or fees are charged, and several open markets. There has recently been a large movement in this direction.

The providing of apparatus for extinguishing fires is always a public duty; the conveyance of waste water is increasingly a public function. The supply of pure water for domestic and business uses, for fire protection and for street cleaning, while often a private enterprise in villages, and sometimes in large cities, is increasingly undertaken by public agencies. Most of the largest cities now own their own water supply systems. Public ownership of gas and electric lighting is less common, as the utility supplied is not so essential and the industry is somewhat less subject to monopoly; but the difference is one of degree only. Street railroads are often under public ownership in Europe; but there have thus far been few cases of the kind in the United States and Canada.[4]

§ 5. **Localized production favoring monopoly.** A number of these enterprises have characteristics in common which appear to make inevitable their drift into monopolistic control. Waterworks, gas, electric lighting, street railways, telephone systems, are among these. However fierce may be the competition for a time, sooner or later either one company drives out the other or buys it up, or both come to an agreement by which the public is made to pay higher prices.

A feature favoring the growth of monopoly when such industries are left to private enterprise is the need to produce and supply the commodity or service at a given locality. While two street railways can compete on neighboring streets, it is physically impossible for two or more to compete on the same street. Two systems of water-mains or gas-mains can be put down, as sometimes is done, but this is not only a great economic waste, but the tearing up of the streets is an intolerable public nuisance. This difficulty is less marked in the case of telephones and electric lighting, and some persons still cling to faith in competition to regulate the rates in those industries; but faith in competition between water companies

[4] See above, ch. 16, sec. 5, statistics of receipts from public service enterprises.

and between gas companies has been given up by nearly all persons now, as it was long since by students of the subject.

§ 6. **Economies of large production favoring monopoly.** A second feature favoring monopoly in such industries is the marked advantage of large production in them. These industries are usually spoken of as "industries of increasing returns." This advantage is enjoyed in some degree by every enterprise, but it is gradually neutralized and limited. The need to extend an expensive physical plant to every point where customers are to be served, and the very much smaller cost per unit of delivering large amounts of water, gas, electricity, and transportation, on the same street, offers a greater inducement for one competitor to crowd out or buy out the other at a more than liberal price. Even then, larger net dividends and correspondingly larger capitalization are secured than were before possible to both companies combined.

§ 7. **Uniformity of products favoring monopoly.** A third feature favoring monopoly is uniformity in the quality of the product furnished. It is a general truth that competition is most persistent where there is the greatest range of choice open to the customer, and consequently the most individual treatment required of the enterpriser. An artist, even a storekeeper, attracts about him a body of patrons who like his product (for the merchant's manner and method of dealing are a part of the quality of his goods), and who cannot be tempted away by slight differences in price. Rival companies in the stage of competition are seen to claim superiority for their particular goods and to improve their service in every way possible. A new telephone company, entering where a monopoly has held the field, works at once a wonderful betterment in rates, courtesy, and service. But as the product of all competitors attains the highest technical standard possible at the time, the rivalry is reduced to one of price, and it is usually a "fight to the finish."

§ 8. **Franchises favoring monopoly.** A fourth feature favoring monopoly in these enterprises is the necessity of

making permanent and exceptional use of the public streets and alleys. If this right were granted by a general law to every citizen, this feature would be sufficiently implied in the foregoing discussion. As it would be intolerable to allow private interests to use public property in whatever way they wished, the legislative body makes special grants in such cases in view of the circumstances. Not only is the legislature (or council, or county board of commissioners, etc.) led by the economic difficulties to withhold a charter from a second company, but it may be corruptly influenced by the company already established. The knowledge of the opposition to be encountered in getting a franchise must keep competitors out, even tho monopoly prices are maintained.

In view of these several features, which are so closely related that they form a common character, more or less fully shared by various industries, and especially in view of the necessity for the formal granting to them of peculiar privileges in the form of a public franchise, the public, in order to protect the general interest, is forced to undertake an exceptional control of these industries.

§ 9. **Various policies toward local public service industries.** Several courses are open to the public, acting in its political capacity, to retain these monopolistic advantages for the general welfare. (a) It may do nothing, trusting vainly to competition to regulate the rate, or consciously leaving the result to be worked out by the monopoly principle; this is what in most cases has been done in the past in America. (b) It may attempt, in granting the franchise, to fix near cost the charge for the service or product, so that the franchise will be worth little as private property. (c) It may leave the rate to be fixed by the monopoly principle, but charge for the franchise so much that the value of the monopoly is appropriated into the public treasury. (d) It may have public officials carry on the business, either selling the product at cost or making monopoly profits that go into the public treasury. Various combinations of these plans are fol-

lowed in practice, the most common plan being the fixing of maximum rates which, with improved methods, generally become ineffective. It is difficult to fix a uniform rate that is equitable, because conditions change, and, further, because a uniform rate must be applied to all parts of the town, altho the cost of service varies greatly. It is difficult because of the limited number of competent bidders, to sell the franchise for what it is worth. There remains the policy of public ownership to secure the profits of monopoly to the public, either directly or in a diffused manner. There is no doubt that the general trend of municipal policy everywhere is toward public ownership of this type of local public service industries.

§ 10. **State ownership of various kinds.** The movement toward public ownership by the American states has been much less marked than that by the municipalities. The commonwealths have retired from some fields where once they were engaged in industry. Students of American history know that between the years 1830 and 1840 some states engaged largely, even wildly, in canal building, railroad construction, banking and in other enterprises. The undertaking of these industries was determined often by political and by selfish local interests, and their operation often was wasteful. A few enterprises succeeded, the most notable of these being the Erie Canal in New York. The unsuccessful ones remained worthless property in the hands of the state or were sold to private companies, as in the case of the Pennsylvania Railroad. This reckless state enterprise was a bitter lesson in public ownership, and continued for three quarters of a century to have such an effect on public opinion, that few proposals for public ownership could have a fair hearing in America. But railroads and canals are publicly owned, and more or less successfully operated, by many foreign states, as in Prussia and other German states, in Switzerland, and in the new states of Australia, and this policy is rapidly extending to other countries and to varied industries.

There has been recently a greatly increased interest in forestry shown by the American states. This is especially likely to be a state enterprise wherever the forest tracts are entirely within the limits of the state, as is the case in New York and Pennsylvania which have been foremost in this work. At present at least 32 states have forestry departments. Most of the forests in Germany are either communal or state-owned. The schools, a great industry for turning out a product of public utility, are largely conducted by the American states and by local units rather than by the nation or by private enterprise. The state encourages researches in the arts and sciences, and gives technical training. A variety of minor enterprises have been undertaken by states to supply salt, phosphate, banking facilities, even some manufactures. One after another the states are adopting the "state use" system of labor in the prisons and public institutions, engaging in agriculture and manufacturing on a large scale, and using the products, amounting to millions of dollars annually, almost entirely for public purposes.

§ 11. **National ownership.** The national governments everywhere appear to be enlarging the field of their ownership. This policy has its roots far in the past. Some industries grow out of the political needs of government. Established as a means of communication with military outposts, the post became a convenient means of communication for merchants and other citizens and grew into a great economic institution. In most countries the telegraph is publicly owned and has been annexed to the post, to which it is very closely related in purpose. National ownership of railroads is the rule, and our policy of private ownership the great exception in the world to-day. Many persons, even some in railroad circles, believe that national ownership of railroads is sure to develop out of our present policy of regulation.

The national improvements connected with rivers and harbors were first political—that is, they were for the use of the government's navy; they became, secondly, commercial—for

the free use of all citizens engaged in trade; and they continue to unite these two characters. Forestry is most largely undertaken in this country by the national government, partly because some forest areas in the West extend over state boundaries, and largely because large tracts of public forest lands were still unsold at the time public attention was attracted to the subject. Since 1890, the policy of reserving great areas for forests, and picturesque districts for national parks, has developed greatly in the United States. The national forest area contained in the various forests in 20 states (not including Alaska and Porto Rico), now covers about 225,000 square miles, equal in area to five states of the size of Pennsylvania. There are, besides, fourteen large national parks, ranging in size from a few hundred acres up to over 2,140,000 acres (the area of the Yellowstone National Park), and aggregating 4,600,000 acres, nearly the size of Massachusetts or of New Jersey, besides numerous other national reservations for monuments and antiquities.

In some countries mines are thought to be peculiarly fitted for national ownership and control. In the German Empire the several states own coal, salt, and other mines. Coinage and banking are everywhere looked upon as functions of sovereignty, and yet it is no more necessary for a nation to own its own mint in order to control the monetary system than for it to print the banknotes in order to regulate their issue. The American government has its own printing office. The fish commission, and the various branches of the department, coöperate with private industry in many ways. This brief survey suggests that the industries undertaken by government are both varied in nature and large in extent, altho small in proportion to the mass of private industry.

§ 12. **Economic basis of public ownership.** The question as to the proper limits of public ownership is one most actively debated. The movement is progressing in accordance with the principle that public ownership is economically justified wherever it secures a product or service of widespread

use that would otherwise be impossible, or insures the public a better quality or a lower price. The question of public ownership is not exclusively an economic question. There are incidental problems, such as its effects on enterprise and on political integrity, with which it is not possible here to deal. In the main, however, public ownership is simply a business policy which must be justified by its economic results. In the case of a general social benefit not to be secured without public ownership (as popular education or the climatic effect of forests), the only question to answer is whether the utility is worth the cost. In the case of industries already in private hands, as waterworks, gas and electric lighting, there is needed, to make a wise decision possible, a knowledge of the effect a change to public ownership will have upon cost and service. If public officials can furnish some goods cheaper than they are furnished by private enterprise, it is because of the wide margin of monopoly profit, not because there is any magic in public ownership. The same general items of cost must be met. The first cost of the plant and the annual interest payments are much the same. Experience shows that, because of political influence and of public opinion, wages are likely to be higher under public ownership, but salaries for management lower. Public collection of dues along with taxes is an advantage not enjoyed by private companies. Several public officials sometimes share the same office and thus reduce expenses. In small towns the public electric lighting and waterworks have been operated more economically under one roof. Some items of cost may be less under public management, but on the whole, public industry probably has no advantage in these respects. Public industry does not have to meet the costs of lobbying and blackmail which are often forced upon private companies. But the greatest source of saving in public ownership is the value of monopoly privileges that, under private management, go into private pockets.

The temptation of political corruption may be more insistent when a large force of men is constantly employed, and

when large supplies are constantly purchased, by public officials, but the temptation is not so strong or so centralized as it is in the granting of franchises to wealthy corporations. Public industry is weakened by the absence of certain motives to excellence that are present in private business. The income of public officials not being dependent on the economy of management, the spur and motives of competitive industry are lacking. No social discovery has made individual honesty and civic virtue useless to good government.

The decision in any specific case is one dependent on local conditions, and the exact limits of public ownership are not fixed. Industry is changing so rapidly that new adjustments are made every year. The main outlines of public ownership, however, are now in large part determined. Some industries do well, others ill, under public management, and between these lie many debatable cases. Waterworks and probably electric lighting, because of the comparative simplicity of their operation, are more suitable for public ownership than are gas-works. No absolute line divides the one group from the other. But whatever the changes, the fact can not be ignored that the increase of public ownership is altering in manifold ways the organization of industry, and is reacting upon the production of wealth, and the distribution of incomes.

CHAPTER 31

SOME ASPECTS OF SOCIALISM

§ 1. The distribution of incomes. § 2. Distribution by force and by status. § 3. Social effects of the right to transmit property. § 4. Effects of the right to inherit property. § 5. Broader social effects of inheritance. § 6. Limitations upon intestate inheritance. § 7. Some merits of competition. § 8. Wide acceptance of competition. § 9. "Economic harmonies" and discords. § 10. Competition modified by charitable distribution. § 11. Competition modified by authoritative distribution. § 12. Meanings of socialism. § 13. Philosophic socialism. § 14. Socialism in action. § 15. Origin of the radical socialist party. § 16. The two pillars of "scientific" socialism. § 17. Aspects of the materialistic philosophy of history. § 18. Utopian nature of "scientific" socialism. § 19. Its unreal and negative character. § 20. Revisionism and opportunism in the socialist party. § 21. Alluring claims of party-socialism. § 22. Growth and nature of the socialist vote. § 23. Economic legislation and the political parties.

§ 1. **The distribution of incomes.** The great economic progress of the past two centuries has been mainly in lines of technical production. The developing natural sciences and mechanic arts have given men a marvelously increased control over forces and materials. This has multiplied the quantities of goods of most kinds at the disposal of men, collectively considered. All men, with rare exceptions, have been gainers; but the increased production has been very unequally distributed among the members of the community. More and more insistently the plea and the demand have been made for better methods of distribution that will give to the masses of the people a larger share of the goods produced. Production is largely a problem of the technical arts; distribution is a problem of social economy.

Two aspects of distribution may be distinguished: functional distribution is the attribution of value (yields) to wealth and labor considered impersonally, as groups of productive agents; and personal distribution is the actual movement of incomes into the control of persons.[1] Personal incomes, whether monetary, real, or psychic, are the sum of a number of elements. Some parts are due to services performed by the person himself. When one combs his own hair he is performing for himself a service that is a part of his income. Benjamin Franklin said it was better to teach a boy to shave himself than to give him a thousand dollars with which to pay barbers for a life-time. Other parts of income are the uses and fruits of legally controlled wealth; chance finds, as gifts of value or lost and abandoned goods; goods assigned to one by authority; wealth inherited; illegal gains by robbery; goods secured on credit; gifts either of things or of services. The many methods by which incomes are distributed to the persons making up a society may be grouped in the following five general classes: force, status, charity, competition, and authority. These will be discussed in due order.

§ 2. **Distribution by force and by status.** Distribution by force is the most primitive mode of distribution. The stronger takes from the weaker. Forceful distribution still persists in the form of crime, and if we include fraud within the term it still affects an enormous amount of income. The lawless take whatever they can, and the supporters and officers of the law do what they can to check the acts. Slavery is distribution by force, as is the levying of war indemnities from a conquered people.

Distribution may be by status, or set rules and customs. In

[1] Distribution as a problem of incomes is not to be confused with distribution of physical goods by transportation (as on the railroads) or by commercial agencies transferring goods from producer to consumer (as in coöperative distribution). Functional distribution is the prime subject of the theory of value in Vol. I (e.g., usance, value of labor, time-preference, profits), a study of which is prerequisite to an intelligent study of the problems of personal distribution.

this case men receive incomes that are independent of their efforts and outside of their control. Distribution by status is guided neither by the personal merit of the recipients nor by the value of their direct services, but the merits and acts of men not living. Feudal society was built on status. Men were born to certain privileges and positions; they inherited property which could neither be bought nor sold; they followed trades which could rarely be entered by any outside of favored families. Caste in India and in other Oriental countries regulates a large part of the life of the people.

This method still prevails to a greater extent in our society than is usually recognized.[2] By public opinion and by prejudice, status is still maintained in respect to the choice of occupations even where the law has formally abolished it, as is seen in modern race problems. In western countries to-day inheritance of property is the main legal form of status and it shades off into other forms of distribution. Private property must find its justification in social expediency.[3] There is no feature of it that is more questioned than is the right of inheritance.

§ 3. **Social effects of the right to transmit property.** The right to transmit property by inheritance or by bequest may be judged with reference to its effects upon the giver, upon the receiver, and upon society at large. It is well to take these three points of view. The right to dispose of property either during life or at death has undoubtedly in many ways a good effect upon the character of men. It stimulates the husband and father to provide for his wife and children, and spurs others to continued economic activity. There is a joy in giving, a joy in the power to bestow one's wealth upon those one loves, or as one pleases. Much of the existing wealth probably never would have been created if men had not

[2] See Vol. I, pp. 190, 223; and above, ch. 2, secs. 11–13.

[3] See Vol. I, pp. 248–255, 297–298, 406, 408, 415–418, 480–481, 483–484; also Vol. II, pp. 22–23, 146–148, 161–162, 178–180, 283, and various passages in the chapters of this Part.

had this right. But there is a limit to the working of this motive, and other motives often are more effective. Many a man after gaining a competence continues to work for love of wealth and power in his own lifetime, as the miser continues to toil for love of gold. When men without families die wealthy, when men not having the slightest interest in their nearest relatives labor till their dying days to amass wealth, it is evident that the right to bequeath property has little to do with their efforts. Love of accumulation and love of power in these cases supply the motives. A more limited liberty to dispose of property at death might still suffice, therefore, to call out the greater part of the efforts now made to accumulate property.

§ 4. **Effects of the right to inherit property.** That the effects upon the receiver of the property are good is somewhat more doubtful. It is true that children reared in families of large incomes would be great sufferers if plunged into poverty at the death of their parents. There is much social justification for permitting families to maintain an accustomed standard of comfort. Few would deny that provision by parents to provide education and opportunity for their children is commendable and desirable. But the evil effects of waiting for dead men's shoes are proverbial. Many a boy's greatest curse has been his father's fortune. Many a man of native ability waits idly for fortune to come and lets opportunities for self-help slip by unheeded. The world often exclaims over the failure of the sons of noted men to achieve great things, for, despite confusing evidence, men still have faith in biologic heredity. A too easy fortune saps ambition and relaxes energy; and thus rich men's sons, if not most carefully and wisely trained, are often made paupers in spirit, while the self-made fathers think their boys have better opportunities than they themselves enjoyed. The greater social loss is not the dissipated fortunes, but the ruined characters. Andrew Carnegie said that it would be a good thing if every boy had to start in poverty and make his own way. Cecil

Rhodes recorded in his will his contempt for the idle, expectant heir.

§ 5. **Broader social effects of inheritance.** Inheritance has good effects for the community insofar as it helps to secure efficient management of wealth. If the son or relative has been in business with the deceased, there is a reason that he should inherit the property, and his succession to it makes the least disturbance to existing business conditions. This consideration, however, has less weight as the corporate form of organization becomes well nigh universal in "big business." Every profligate son, every incompetent heir, is an argument against the inheritance of property. It is to society's interest that no able-bodied member should stand idle. Every child should have presented to him the motive to use his powers in useful ways. Moreover, many feel that the great fortunes now accumulating through successive generations in the hands of a few families are a danger to our free society, even if these fortunes should continue to be well administered. There is a widespread feeling that the heredity of great wealth is, like the heredity of political power, out of harmony with the democratic spirit. Democracy wishes to see men and individuals put to the test, not profiting forever by the deeds of their forebears. This feeling is shared by those who cannot be charged with radical prejudices. It was startling when a conservative body of lawyers meeting in their state association in Illinois, passed a resolution favoring moderate limits to inherited fortunes. Almost every year sees bills of this purport introduced in the legislatures and in Congress. Probably no one of many current radical proposals is more widely favored than this, among men of otherwise conservative social views. The sum most often mentioned as the proper limit is $1,000,000, but in every case it is a sum larger than the fortune of the person speaking.[4]

§ 6. **Limitations upon intestate inheritance.** A proposal

[4] See above, ch. 2, sec. 7, on limitations upon bequest and inheritance.

less crude and with strong reasons of social expediency in its favor is to limit the right of intestate inheritance to persons that have been in essential economic and social relations with the deceased. The foregoing considerations show that the case for the right of gift in the lifetime of the giver is strongest; that for the right of bequest comes next. The man who has acquired wealth may usually be trusted to decide who bear to him close social or personal relations, and to say whose lives have in a measure furnished the motives of his activity. But the right of intestate inheritance by distant relatives is one that stands on weak social foundations. It is a survival from more patriarchal conditions when, in the large family, or clan, the bond of unity was very strong. A truer test to-day of the proper limits for intestate inheritance is whether the wish to provide for these heirs has furnished the motive for the producing and preserving of the wealth. The claims of those nearest in blood and closest in personal relations are strongest. Family affection and friendship form the strongest of social ties, and it is socially expedient to cultivate them. Motives for abstinence and industry must be strengthened. But the same test shows that the zealous regard of the American law for the rights of distant kinsmen in foreign lands, or in distant quarters of this country, is irrational, and is unjust to the community where the fortune was made. Public opinion tends strongly toward this idea.

Property rights as they exist are clearly seen not to be a product of pure reason. They are the result of social evolution, of historical accidents, of class legislation, and in many cases, of selfish interests. Changing social conditions and ideas are bringing many changes in law, and further changes must be expected to come, which will reduce the influence of inheritance of property in fostering status in distribution. Especially important are the increasing application of the progressive principle to incomes and inheritance,[5] and the de-

[5] See ch. 18.

velopment of insurance to put family savings into the form of terminable annuities instead of capital sums.[6]

§ 7. **Some merits of competition.** The dominant method of distribution to-day is that of competition.[7] This is not a mere accident, but is a resultant of unending experimentation with different methods of distribution carried on since the beginning of human society. A method of distribution had to be found and retained that would work under the conditions of human nature at each stage of social progress; and competition, however imperfectly, has worked. It is evident from the voices of praise and of blame that competition has its good and its bad aspects. Let us observe first the good ones. Competition acts to distribute the working force over the field of industry wherever it is most needed. The remarkable (tho far from perfect) adjustment of industry to the needs of each neighborhood is brought about by individual motives, not by centralized authority. Wherever consumers settle, stores are started and factories are built. Wherever work is to be done, men come in about the right number to do it. It is not mere chance that produces this result. The available skill is adjusted to varying needs by the delicate measurement of the market rate of wages. Two-sided competition gives a definite rule of price—the only definite impersonal rule. The theoretical competitive price is the standard to which things tend constantly to adjust themselves in an open market.[8]

Competition is an essentially economic method as contrasted with the legal and personal methods above and later described, because it is impersonal and reducible to a rule of value. Distribution under competition is made, not with reference to abstract ethical principles or to personal affection, but to the value of the product. Each worker strives to do what will bring him the largest return, and the price others pay ex-

[6] See ch. 12, sec. 14.

[7] See ch. 2, sec. 10.

[8] See Vol. I, pp. 54 and 66; also pp. 504–507 in an organic theory of value.

presses their estimates of the service in that market. Each seeking his own interest is led to make himself more valuable to others. In most cases and in large measure, competition stimulates men to sacrifice, to invention, to preparation; thus is zeal animated and are efforts sustained. In the economic realm, as is now seen to be the case in the biologic realm, competition of some effective kind is an indispensable condition not only of progress but of life without degeneration. Monopoly, as we have noted, never has ceased to rest under the ban of Anglo-Saxon law, and therefore to exemplify compulsory, as opposed to competitive distribution. A striking feature of the competitive method is its decentralization. Each helps to value the economic services of each. If one pays more for the services of the singer than for those of the cook, it is not because one would rather listen to the singing than to eat when starving, but because by apportioning one's income one can get the singing and the eating too. In the existing circumstances, the singer's services seem to the music lover to be worth paying for, and he backs his opinion with his money. So each is measuring the services of all others, and all are valuing the services of each. It is distribution by valuation, and it is valuation by democracy.

§ 8. **Wide acceptance of competition.** On purely abstract and *a priori* grounds competition cannot be accorded an ethical sanction, as is sometimes assumed. But because of the qualities above outlined, and because it meets in large measure the pragmatic tests, the competitive rule of distribution appeals to all men (even to those who denounce it) as having in many of its applications a moral character, as compared with the other possible methods of distribution. Indeed, the competitive rule is the only rule that does not involve either personal and arbitrary judgment (force, charity, and authority) or status. Even such measure of justification as is found in status (as in property and inheritance laws) is traceable, in the long run, to competition. The case for a limited application of status is based upon its results in stimulating motives

of effort and accumulation.[9] When the rule of authority is applied to-day in the large field of public regulation where *actual* competition has become impossible, almost the only guiding rule is *hypothetical* competition. The just rate is felt to be that which in the long run *would be* just sufficient to afford "normal" incomes to labor and to capital, to call forth the necessary effort, skill, judgment, and forethought, if competition *were* at work, as it is not.[10] Only this rule of hypothetical competition redeems these public rates from arbitrariness, favoritism, and force.

§ 9. **"Economic harmonies" and discords.** Every truth in political philosophy finds some exaggerated expression. Competition, as compared with status and custom, has some notable merits; and when the eighteenth century was throwing off some of the burdens inherited from the more static Middle Ages, competition appeared to be a panacea for all the ills of society.[11] The belief in the benefits of competition and the virtues of economic freedom found its extremist expression in the first half of the nineteenth century in the doctrine of "the economic harmonies." According to this, if men are left entirely free to do as their interests dictate, the highest efficiency and best results for all will follow; the economic interests of all men are in harmony. Corresponding with this doctrine is the economic policy of extreme *laissez faire.*

But experience has shown that the economic interests of the individuals in a community are only partly, very rarely are they wholly, in harmony. There are three species of competition in every market: that between sellers, that between buyers, and that between sellers on the one hand and buyers on the other.[12] If at any point free competition is hindered, even the disciple of economic harmony must, from the very nature of his doctrine, expect a discordant result. In reality compe-

[9] See above, sec. 2, note 3.

[10] Compare, e.g., portions of chs. 9, 15, 20, 21, 27; and 29, sec. 17.

[11] See ch. 2, secs. 11–13.

[12] See Vol. I, p. 75.

tion is rarely quite complete on both sides, and when it is not the weak usually suffer. Men do not start with fair opportunities. All that they may be entitled to have under competition may be so little that social sympathy seeks to better the results; hence poor relief, public and private. Society as a whole has an interest in the outcome of the individual's economic struggle. It cannot see men starving or driven into crime. Moreover, when competition is the rule of valuation, it, like all valuations, partakes of the quality of those choosing —wise or foolish, good or evil.[13] And tho competition is the rule of democracy in economics, yet democracy cannot permit the economic vote of a vicious or of a foolish group to stand, where the goods, services, and prices resulting offend the prevailing public judgment and social conscience.

§ 10. **Competition modified by charitable distribution.** In practice the competitive method of distribution always has been modified or supplemented in varying degrees by the other methods. Important among these is charitable distribution. Charitable is here used in its original sense, as synonymous with benevolence and affection. First is parental love, the root and type of all the forms of charity. There is a complete lack of economic equivalence in the relation of parent and child in early years. The helpless infant does nothing for the parent, the parent gives all and does all for the child. Gradually, however, the balance is regained; as the years go on, not only do children repay in affection but in many cases they repay in material ways. Especially in the factory districts and on the farm the child sooner or later begins to reëstablish the balance, becomes a worker, and contributes to the family income as much as the cost of his support, and finally more. A student of modern English town life has traced the curve of poverty traversed by the average poor family as the children are first an economic burden, and later an aid to their parents. In the middle, or propertied, classes the children do not for many years cease to be a finan-

[13] See, e.g., Vol. I, pp. 25, 71, 205, 479, 509, 511, 513.

cial burden to their parents, and in most cases the economic balance is never reëstablished. It is not to the parents, but to the succeeding generation, that the debt is tardily paid.

Friendship widens the range of generosity and multiplies the mass of gifts. Broad sentiments of humanity lead to gifts outside the range of personal affection and personal interest, to the beggar on the street, to institutions devoted to charity. In New York state alone a sum of more than $20,000,000 a year is expended by institutional charities. About $512,000,000 in public benefactions were given in the United States by private donors in the year 1915, and in this respect that year was not exceptional. An enormous and increasing body of property is thus being year by year socialized, largely through bequests from persons without direct heirs. Great public subscriptions to the sufferers from great disasters, such as the Irish and the Indian famines, the Chicago fire, the Galveston flood, the San Francisco earthquake, the great European war, bespeak a widening generosity. Religion impels to the building of churches, to the support of priests, missions, and manifold religious undertakings. Charity in this connection is the expression of a sentiment that varies from the most intense personal affection to the broadest and most general humanitarian sentiment.

§ 11. **Competition modified by authoritative distribution.** Authority is, after force, the oldest and was the earliest widely operative method of distribution. It shades into force, status, and charity in manifold ways, but it is essentially the assignment of a common, or social, income to individuals by some person or persons chosen, or accepted, by the society to perform this function. Thus it may be distinguished from force, which takes for itself what belongs to another; and from charity, which gives to another what belongs to one's self; and from status, which transmits claims to income from one generation to another by a fixed impersonal rule, not by a personal judgment in the particular case.

Authoritative distribution is the dominant method in patri-

archal tribes, in communal societies, and in monastic and other religious orders. Each person works at what he is commanded to do, and some one in authority (patriarch, head of the community, father of the monastic order) portions out the tasks and the rewards. In the family this rule largely prevails, and even after the children have come to years of discretion they not infrequently accept, from habit or affection, the will of the parents, and give up their entire wages to receive back a portion. The method of charitable distribution while the child is young gradually changes to authoritative distribution after the child becomes a worker. The untrained and indocile youth, however, is made the subject of compulsory distribution.

The collection and distribution of taxes is by public authority. No attempt is made to give back an exact equivalent to each taxpayer. The money is taken and spent by authority. The new forms, or at least the new extensions, of taxation, especially of incomes and inheritances at progressive rates, are very important examples of authoritative distribution.[14] The courts sometimes find themselves obliged to apply the method of authoritative distribution, altho they do it unwillingly. They try to confine their efforts to interpreting the contracts men have voluntarily entered into, and they avoid, so far as possible, the making of contracts or the fixing of rates. Authoritative distribution is exemplified in the work of many commissions appointed by law to fix rates or settle disputes, such as boards of conciliation and arbitration and railway commissions.

§ 12. **Meanings of socialism.** Our reason for leaving to the last the discussion of *authority* as a method of distribution is not that it appeared last in historical development, but that it now is the most strongly advocated as an alternative of competition. One of the most striking developments of opinion in the nineteenth century was that favoring an increasing use of authority in distribution. This was meant not merely

[14] See above, ch. 18.

to supplement and modify competition, but to displace it completely, or (in the more moderate program) in large part. This opinion, or plan, has appeared under a variety of names, the main ones being communism, collectivism, social-democracy, and socialism, of which the last name has just now the greatest vogue. Socialism is a word of manifold meanings no one of which is generally accepted. Discussion is therefore often a Babel of tongues.

Socialism designates (1) a social [15] philosophy (2) a mode of social action, (3) a particular political party. There is thus philosophic, active, and partisan socialism. Each of these may be taken either in an absolute or in a more or less relative sense. The first meaning is the most fundamental, the second less so, and the last the least fundamental, but just now the most frequently used.

§ 13. **Philosophic socialism.** As a philosophy socialism is related to social just as individualism is related to individual. Socialism is faith in the group motive and group action rather than in self-interest and competitive action. Instead of social philosophy we may say social faith, or social ideals. This faith may be absolute, or radical, to the rejection of all economic competition; or it may be moderate, and leave more or less place for self-interest and competition. Every man of conscience and of ideals has moods that are socialistic (in this sense) and dreams of a world without toil, competition, or poverty.

This social philosophy has taken form as "Christian Socialism" among men of strong religious natures, in various religious denominations. Great secular dreamers—Plato in his "Republic," Sir Thomas More, in his "Utopia," Edward Bellamy, in "Looking Backward," William Morris, in "News from Nowhere," and others—have painted beautiful pictures of ideal economic states from which all of the great evils and problems of our society have been banished.

§ 14. **Socialism in action.** Active socialism is group action

[15] See Vol. I, p. 6, on "social" and the social sciences.

in economic affairs. This may be by private voluntary groups, as a club, church, or trade union, or by a public group, or political unit of government, which has therefore a compulsory character. The radical kind of active socialism would be the ownership by government of all the means of production and the conduct of all business, assigning men, by authority, to particular work and granting them such incomes as the established authority thought they deserved. This kind exists nowhere. A moderate kind of active socialism is represented by each separate case of public ownership or industry. Even public regulation by authority, of the many kinds described in this volume, is touched with a quality of active socialism. In this sense there can be more or less of active socialism in a community; a state may be more or less socialized in its economic aspects. An English Chancellor of the Exchequer declared in the last decade of the nineteenth century, "We are all socialists now." The ever-increasing sphere of the state [16] gives to that statement to-day a larger, fuller meaning than when it was uttered.

Socialism in action is of course always the expression of a more or less socialistic philosophy shared by a majority of the people. This great recent movement of socialization in industry is the expression not of a radical but of a moderate social philosophy. It does not look to the abolition, but only to the modification and limitation in some directions, of private property and of competitive industry. The spirit of this movement is opportunist, or experimental. It is ready to try public action, but recognizes that it has difficulties and limitations. The ultra-radical and the ultra-conservative alike declare that these measures "logically" lead on to the complete destruction of private property. But men find that they can warm their hands without being "logically" compelled to thrust them into the fire, and that they can quench their thirst without a growing resolution to drink the well dry. When

[16] See e.g., ch. 9, secs. 2, 10; ch. 11, secs. 7, 8; ch. 16, secs. 3, 4, 12; chs. 18, 21, 22, 23, 27, 29, and 30.

this governmental activity has proceeded somewhat extensively and systematically in cities, as in Great Britain, it is called municipal socialism; and in states, as in Germany, it is called state socialism.

§ 15. **Origin of the radical socialist party.** Socialism in the partizan sense is an actual political organization. Both in Europe and in America such organizations have been designated as "social-democratic," "socialist labor," or "labor" parties. Socialism in this sense of a party organization, or movement, is very different from a social philosophy. In its partizan phase socialism exhibits all of the baffling variability and elusiveness that it does in its other aspects. However, in its printed program the socialist party sets forth both a socialist philosophy and an ideal of active socialism in their most radical forms.

Modern political socialism traces its origin directly to the most radical of German social philosophers, Marx, Engels, and Lassalle. Karl Marx (1818–1883), preëminently the philosophic leader of the movement, sought to give a solider foundation of reason to the somewhat romantic socialist philosophy current in his day. His own doctrine, first set forth connectedly [17] in the Communist Manifesto in 1848, he called Communism. This has come to be called by his followers, "scientific socialism." "Scientific" was meant to emphasize the contrast with "Utopian" socialism, as Marx and Engels somewhat scornfully characterized the older communist philosophy, romances of the ideal state, and attempts to found and conduct small communistic states.

§ 16. **The two pillars of "scientific" socialism.** Scientific communism was to be based upon two immovable pillars. The one was "the labor theory of value," by which all profits and incomes from investment were shown to be robbery of the wage-workers.[18] "Capital," that is, the ownership of the means of production, was declared to be the instrument of this

[17] See Vol. I, p. 502, on communism and value theory.

[18] See Vol. I, pp. 210, 228, 502 on the labor-theory of value.

"exploitation." The other foundation stone was "the materialistic philosophy of history," that is, the explanation of all the intellectual, cultural, and political changes of mankind from the side of the material economic conditions as causes. As Engels expressed it, "The pervading thought . . . that the economic production with the social organization of each historical epoch necessarily resulting therefrom forms the basis of the political and intellectual history of this epoch." This doctrine denies that, in an equally valid sense, biological changes in brain, and cultural changes in science, arts, and education, cause the mechanical inventions and improved processes and thus alter the form of economic production.

§ 17. **Aspects of the materialistic philosophy of history.** Marx's general formula of economic materialism had three minor propositions or corollaries: (a) The doctrine of the *class conflict;* all history is a record of the class struggle between those who have property, the ruling classes within the nations, and those who have not, the oppressed working class, (a conception of history blind to most of the great international conflicts). The class conflict was declared to be more sharply marked and bitter than ever before; "the entire human society more and more divides itself into two great hostile camps, into two great conflicting classes, *bourgeoisie* and proletariate." (b) The doctrine of *increasing misery;* the conditions before described must cause the steadily increasing degradation of the masses. (c) The *catastrophic theory;* the final and inevitable result of this movement must be a revolution, when the downtrodden workers will throw off their chains and expropriate the expropriators. There is no doubt that Marx, when he first formulated this philosophy, believed that such a revolution, most violent in nature, would occur within a few years.

§ 18. **Utopian nature of "scientific" socialism.** The term "scientific" set in contrast with "utopian" was meant to imply that the doctrine of Marx was not "utopian" (a word which had come to mean fanciful and impracticable). Marx

had a contempt for the romances of the ideal state and for what he deemed to be the unfounded speculations of earlier prophets of communism. But utopian (from *utopia*, Greek for no place) means nonexistent, and Marxian socialism surely was that. "Experimental" or "actually at work" would have been a more logical contrast with "utopian." Marx and his followers likewise had a contempt for the communistic experiments, or settlements and colonies, which by the scores had been started and had failed, bringing discredit upon all communistic proposals. The beauty of "scientific" socialism was that it never could be tried on a small scale—or tried at all until a whole nation adopted it.

The old time "scientific" socialist had a lofty scorn for any less dogmatic philosophy than his own or for any less sweeping social change than that he expected. Moderate social reform to him was but temporizing; indeed, it was evil, inasmuch as it helped to postpone the inevitable, but in the end, beneficent catastrophe of the social revolution. A step-by-step movement toward socialism, state socialism,[19] even of a pretty sweeping character, was, to the old-time Marxians, not really socialism at all. A valid reason for this attitude was found in the extremely limited manhood suffrage and in the aristocratic class government of most European countries, especially of Germany; so that, as the party socialists saw it, multiplying state enterprises but increased the power of the ruling, and eventually of the militarist, class. The social-democratic leaders felt that until they themselves were in power, the growth of "state socialism" would be a calamity for the nation. The events of 1914 may make our judgment tolerant toward their feeling.

§ 19. **Its unreal and negative character.** The so-called "scientific" socialism had, therefore, a peculiarly unscientific spirit; for, in a modern sense, science implies a patient search for truth, not a sudden revelation; a constant testing of opinions by observation and experiment, not a dogmatic conviction

[19] See above, sec. 14.

that refuses the test of reality. "Scientific" socialists talked much (and still talk much) of the "evolution" of social institutions; but they refused to admit the essential condition for institutional evolution, the competitive trial on a small scale, of a new form of economic organization to prove its fitness to survive. Indeed, it had been tried on a small scale many times, and had always failed in a brief time.

Lincoln said that a man's legs ought to be long enough to reach to the ground; but "scientific" socialism was not built on that plan. To be sure it contained many elements of truth, but these were so distorted that the result was a caricature of history, of philosophy, of economics, and of prophecy. The most important influence of radical socialism has been exerted through negative criticism. It has performed the function of a party in opposition, relentlessly hunting out and pointing out the defects of existing institutions, arousing the smugly contented, and, by its very recklessness and bitterness, inspiring at times a wholesome fear of more revolutionary evils. This has been a real service to the cause of moderate and constructive reform.

§ 20. **Revisionism and opportunism in the socialist party.** Most men have always agreed in an adverse judgment of the claims of "scientific" socialism. The criticisms have been admitted in part even by the intellectual leaders among the Social-democrats. They lost some of their fantastic illusions, they tempered some of their exaggerated claims of oracular inspiration. "Revisionism," the socialist higher criticism, became influential in the party. Whenever the party gained any success at the polls, the socialists in public office and the party leaders found it necessary to "do something" immediately. The rank and file might be willing to talk of the millennium, but preferred to take it in instalments instead of waiting for it to come some centuries after they were dead. And so the socialist party, as fast as it gained any practical power, became "opportunist" and worked for moderate practical reforms. The leaders did this with many misgivings

lest the masses might become so reconciled to the present order that they would refuse to rise in revolt. In that case the revolution never could happen (altho it was inevitable).

As the party socialists did more to improve the present, they talked less of the distant future state. They ceased their criticisms of "mere temporizing" "*bourgeois*" reforms, and began to claim these as the achievements of the socialist party. They began to write of the remarkable growth of social legislation in Europe and America in the past half century under such titles of "socialism in practice" and "socialists at work." This was despite the fact that these reforms were all brought about by governments in which the socialist party had no part whatever or was a well-nigh insignificant minority. This bald sophistry, or self-deception, was easily possible by confusing the word "socialist" as relating to the abstract principle of social action, with socialist as applied to their own party organization. It is as if the Republican party in the United States were to claim as its own all the works of the republican spirit and principles of government in the world from the party's organization to the present time.

§ 21. **Alluring claims of party socialism.** In thus changing the emphasis of its claims, the socialist party has been somewhat put to it to retain any clear distinction between itself and other parties of social reform. It has done this however by continuing to proclaim the *ultimate* desirability of reorganizing all society without leaving any productive wealth in private hands. It has had no misgivings prompted by the experience of the world. Its case continues to be far the strongest in its negative aspect, the exposure of the evils in present society. To many natures the claims of the socialist party have all the allurements of patent medicine advertisements. These describe the symptoms so exactly and promise so positively to cure the disease, that they are irresistible—especially when the regular physicians keep insisting that the only way to get well is to take baths and exercise, and stop the use of whisky and tobacco.

Those attracted to the socialist party by its sweeping claims are of two main types. The one is the low-paid industrial wage-worker; the other is the sympathetic person of education or of wealth (or of both), who has become suddenly aroused to the misery in our industrial order. To both of these types, feeling intensely on the subject, the socialist party appeals as the only party with promises sweeping enough to be attractive. The one becomes the proletarian, the other the intellectual, the one becomes the workshop-, the other the parlor-socialist. Many of the latter type are persons overburdened either with unearned inherited wealth or with an undigested education. Many of them, having enjoyed for a time the interesting experience of radical thought and of bohemianism, come later to more moderate social opinions.

§ 22. **Growth and nature of the socialist vote.** In 1912 the socialist party in the United States polled 900,000 votes in the presidential election. The socialist parties in the various lands have almost steadily grown, and now cast votes numbering in the aggregate six to ten million (as variously estimated, the name socialist being elastic). The socialist parties may be expected to continue growing. They will ultimately gather within their folds most of the ultra-discontented, and others that are not able to find an alternative economic philosophy and a plan that inspire their hopes. But the socialist party vote is made up of men of many shades of opinion, a large number of whom hold only the mildest sort of socialistic philosophy. Not many of the more than 3,000,000 social-democratic voters in Germany before the war were members of the regular party organization; but they supported the party as the one unequivocal way to declare themselves against militarism and undemocratic class-government. In the United States only about one tenth of the socialistic party voters have been enrolled as members of the party.

§ 23. **Economic legislation and the political parties.** This floating socialist vote is now so large that it is eagerly sought by candidates of the older parties. These independent

voters care little for the radical and distant tenets of the socialist party leaders, and these, to attract wider support, are forced to place increasing stress upon immediate and moderate reforms. On the other hand, men of larger qualities of leadership in the older parties are constantly adopting and advancing pending measures of social reform. Where this is not done the socialist party tends more quickly to develop into the one powerful party of protest and of popular aspiration, receiving support from many elements of the middle and small propertied classes and from non-radical wageworkers. This movement from both sides is leaving less noticeable the contrast between the socialist party and other parties claiming to be "progressive" or "forward looking." The strongest allies of the more radical communistic faction of the socialist party are those members of the conservative parties who fail to recognize the need of humane legislation, who irritate by their unsympathetic utterances, and who unduly postpone by their powerful opposition the gradual and healthful unfolding of the social spirit, energy, and capacity of the nation. The greatest problem of social and economic legislation for the next generation is to determine how far, and how, the principle of authority may wisely be substituted for the principle of competition in distribution.

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